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THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

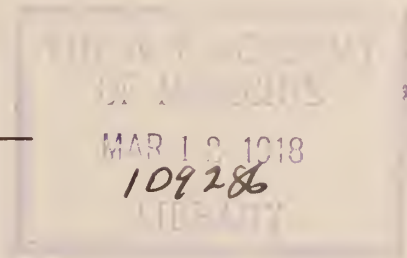
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY

UNDER THE DIRECTION OF THE COUNCIL

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

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INDEX TO VOLUME X

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THE JOURNAL
OF THE
Indiana State Medical Association

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ISSUED MONTHLY under Direction of the Council

VOLUME X
NUMBER 1

FORT WAYNE, IND., JANUARY 15, 1917

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CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
The Workmen's Compensation Law in Its Relation to the Practice of Medicine. Mr. Howe S. Landers, Indianapolis		1	Human Disease Carriers		19
The Diagnosis in Certain Gastric Disorders. Hugh Miller, South Bend		10	Why Efforts to Lower Indiana Medical Standards Should Be Defeated		19
The Necessity of Coordinating Methods in the Definitive Diagnosis of Pulmonary Tubercular Lesions. F. B. Wynn, M.D., Indianapolis		15	Wake Up, County Secretaries		21
The Roentgen-Ray Diagnosis of Pulmonary Tuberculosis. R. C. Beeler, M.D., Indianapolis		18	The Urgent Needs of Our Medical School		21
			Notice to New County Secretaries		22
			Editorial Notes		22

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879.

NEW WORK

JUST READY

A PRACTICE OF GYNECOLOGY

By HENRY JELLETT, M.D., F.R.C.P.I.

Master, Rotunda Hospital, Dublin; Extern Examiner in Midwifery and Gynecology, Dublin University, Royal University of Ireland, and Victoria University, Manchester, etc.

Octavo, 618 pages, 374 engravings (many in colors) and 11 colored plates. Cloth \$6.00, net.

This work is the product of one of the world's foremost specialists in the field of gynecological practice and it is replete with the results of his long and rich experience. Simplicity and clearness of diction make the book both easy and attractive to the general practitioner, and to the specialist the volume possesses particular attraction in the profusion of its illustrations, most of which are original and many are in colors.

It is in operative detail that the book excels. Many operative procedures given are original with the author and they are presented in an especially clear manner. No pains have been spared, either in text or illustrations, to show how each operation should be performed; especially valuable are certain series of illustrations which portray, step by step, the various stages of different operations. Two important chapters are included upon "Vaccine Treatment in Gynecology" and "Radiotherapy in Gynecology." The instructions in this book can be followed with confidence by both students and practitioners.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		PAGE	MISCELLANEOUS		PAGE
Indianapolis Medical Society	32	Deaths	27		
Bartholomew County	35	News Notes and Personals.....	28		
Carroll County	36	The Truth about Medicines	39		
Elkhart County	36	Book Reviews	42		
Floyd County	37				
Huntington County	38				
Lake County	38				
Noble County	38				

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Next Annual Session, Evansville, September 26, 27 and 28, 1917

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3d—Jos. D. Heitger, Bedford.....	December 31, 1919	9th—F. A. Tucker, Noblesville.....	December 31, 1919
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6th—O. J. Gronendyke, Newcastle.....	December 31, 1919	12th—E. E. Morgan, Fort Wayne.....	December 31, 1916
		13th—A. C. McDonald, Warsaw.....	December 31, 1917

*No election held in 1915.

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Announcement of Committees for 1917 will be published later

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VOLUME X

FORT WAYNE, IND., JANUARY 15, 1917

NUMBER 1

ORIGINAL ARTICLES

THE WORKMEN'S COMPENSATION LAW IN ITS RELATION TO THE PRACTICE OF MEDICINE *

MR. HOWE S. LANDERS
Secretary State Industrial Board
INDIANAPOLIS

If it had not been for the fact that your profession is keenly interested in the Workmen's Compensation Act, I most assuredly would not have had the temerity to have accepted your committee's invitation to address you, knowing that I could contribute nothing of professional interest. I have, however, during the past year, spent some time each day in communication with various members of your profession regarding cases that were subject to the terms of the law, and my experience leads me to the belief that your work among this class of cases will be made easier for an understanding of the Compensation Act, and the theory upon which it is founded.

So with this idea in mind, and giving you warning that this paper will be confined to a discussion of the terms of the act, but omitting the parts that pertain to the routine work of the Board or that present legal questions of interest only to lawyers, I shall proceed.

To clearly understand the present it is necessary for us to briefly look to the past so that we can compare the two, and thus gain an appreciation of the change that has been brought about.

Under the system regulating the rights of injured workmen that was in force before the passage of the present law, the right of recovery by the injured employee was based upon some actual or constructive fault of the employer. If

no fault existed, no matter how free from fault the injured was, there could be no recovery.

This doctrine that has played such an important part in English and American law was in turn founded upon three other doctrines, the doctrines of assumption of risk, contributory negligence, and negligence of a fellow servant. By assumption of risk I mean an injured workman could not recover on account of his injuries if the injury could be said to grow out of a risk inherent to the employment, and one which he was held to have assumed at the time of employment, nor could he recover if he, by his own negligence, contributed in any degree to his injury. And further he could not recover if his injury was caused by the negligence of a fellow servant, over whose actions it could be said the employer had no control, and who in no way stood in a representative relation to the employer.

Holding these doctrines in mind, it can readily be seen that it was difficult in the past for an injured employee to recover, for if he had not assumed the risk of injury, it could be said that he contributed to his injury by his own negligence or that the injury was caused by the negligence of a fellow servant. Long before the passage of the compensation act, each of these doctrines had received the attention of the legislatures and the courts, but the theory that the employer must in some way be at fault persisted.

Gradually there was borne upon the minds of men the knowledge that this system was not meeting the question of industrial accidents, the necessary procedure of the courts was slow, and that the long delayed recovery, if any there was, came at so distant a time that the injury and suffering was in no way alleviated.

Changed industrial conditions, modern inventions, and the general introduction into industry of complicated and powerful machinery, with the resultant increase of accidents, demanded a

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

change. Students from carefully compiled statistics demonstrated that fully 60 per cent. of all accidents were caused by nobody's fault, yet the injury to the individual, the family and to society at large, was as great as though the employer were alone to blame.

Out of this condition grew the theory of workmen's compensation, a theory that said that industrial accidents are inherent in and incidental to industry, and that the cost of same should be borne by the industry in which they occurred as a cost of production.

In the pamphlet issued by the Industrial Board, the underlying principle of workmen's compensation is defined as follows: "The principle of social justice and right, which underlies, and which in fact, is the foundation of workmen's compensation, is that industry should bear the burden of its accidents, and that the cost thereof should be added to the selling price of its products and be distributed among the consumers."

Germany was the first to recognize changed conditions and to meet them by putting in force this principle, the German Law having been enacted July 6, 1884. Other nations followed, and today compensation laws are in force in forty-four nations, and thirty-three states of the United States, all varying somewhat as to their terms, but the basic principle underlying each being the one I have just quoted.

The Indiana Act was passed by the 1915 session of the legislature, the law becoming operative as to all its terms Sept. 1, 1915.

COVERAGE OF THE ACT

First as to persons covered, and second as to the injuries covered.

The employer and employee are the two classes of citizens directly covered by the act, and they only as relating to personal injuries or death to employees arising out of and in the course of the employment, unless either of them shall have given prior to the accident resulting in injury or death, notice to the contrary.

The act uses the term every employer and every employee, and standing along this would be comprehensive and all inclusive. This phraseology, however, is qualified by the words "except as herein stated," and Section 9 of the Act states that the terms except as to reporting accidents shall not apply to casual laborers, to farm or agricultural laborers and to domestic servants, nor to their employers. It is seen, therefore, that excepting farm or agricultural, casual laborers and domestic servants and their employers that all employers and all employees are covered unless they shall, thirty days prior to

any accident, give notice of their rejection of the terms of the law.

In order to reject the act, the employer or employee desiring to avail himself of this privilege must give written notice to the other of his rejection, and this notice does not take effect until after thirty days from date, and all accidents happening within that period are subject to the terms of the law.

All of the terms of the law must, in order to obtain a clear understanding of same, be read together, and the act itself defines some of the terms used. We have seen that casual employees and their employers are not covered by the act, but the term casual as used does not mean the pick up or irregular workmen, as Section 76 of the act defines the term employee as including every person, including a minor, in the service of another under any contract of hire, express or implied, except one whose employment is both casual and outside of the usual course of the business, trade or occupation of the employer, and thus the term casual as used in setting forth the employers and employees exempted from the law is declared to apply alone to the employment and not to the employee.

An illustration as to casual employees covered would be the man hired by a merchant during the heavy buying season for two or three days. This would be a casual employee within the ordinary meaning of that term, but not casual as used in the compensation act, for the reason that the workman was employed in the usual course of the employer's business, and if an accident befell this employee, it would be subject to the terms of the act.

Again we have seen that farm or agricultural employees and their employers are not covered by the law, but this does not mean that certain individuals are not covered, but does mean that certain employments are not covered. As long as the farmer tills his soil and engages in agricultural pursuits, neither he nor his employees are subject to the act, but when he engages in industrial or commercial pursuits and takes his farm hands with him, he, as other employers, is subject to the terms of the act. For illustration, the farmer who operates a threshing machine outfit away from his own farm and employs workmen in so doing, has been held not to be a farmer within the meaning of Section 9, but an industrial employer, and his employees, if injured, entitled to compensation and medical aid. This leaves but one class of employer and employees exempted, and that "domestic." By this term is meant domestic establishments proper; not every cook or waiter is a domestic

servant, and the cook or waiter in the hotel and their employers are within the term "every employer and every employee," and not within the exempted class of "domestic," and injuries, if any, are covered.

It is well here to add that as to reporting accidents there is no exception, but every employer, regardless of vocation, is required to keep a record of all injuries, fatal or otherwise, received by his employees, and report to the Industrial Board all such that result in disability of more than one day.

So much for the citizens of the state, but the query naturally arises, is the state itself an employer within the meaning of this act? The answer is "yes." Section 18 of the law expressly provides that the terms of the act, except Sections 3, 4, 10, 11 and 12 shall apply to the state or any municipal corporation within the state, or any political division thereof, and to the employees thereof, and by this section the state is covered the same as any private employer with one important exception, and that is that while the private employer and his employees may reject the act, the state and its employees cannot so reject, for this section by excepting Sections 3 and 4 deprives it of the right of rejection, making the act compulsory as to the state and its employees.

One other class of employers exempted remains, and that is the employer engaging in interstate commerce, where the laws of the United States provide for compensation or for liability for injury or death by accident of such employees. This section is inserted for the reason that in such case the Federal Congress alone has the primary power to legislate. However, it affects the railroads alone, for Congress has enacted but one liability law, and that applying only to railroads engaging in interstate commerce.

I will now briefly state the position of the employer and the employee who have availed themselves of their right to reject the act, and have exempted themselves from the provisions of the law.

The legal effect of such action is set out in Sections 10, 11 and 12.

Section 10 is as follows: "Every employer who elects not to operate under this Act shall not in any suit at law by an employee to recover damage for personal injury or death by accident be permitted to defend any such suit at law upon any one or all of the following grounds: (a) That the employee was negligent. (b) That the injury was caused by the negligence of a fellow employee. (c) That the employee had assumed the risk of the injury."

This means that the rejecting employer is deprived of the defenses set out in the beginning of this paper as being the doctrines upon which the old theory was founded. If he rejects he must take his chance in court without the aid of these defenses.

If the employee alone rejects and the employer complies with the law, the employer may use the three common law defenses in defending any suit for damages by such injured employee. If, however, both employer and employee reject, the legal effect is the same as though the employer alone had rejected and the employer loses the right to defend on any one or all of the three common law defenses as set out by Section 10.

Having noted the persons covered by the act, it is well now to explain the class of injuries covered.

The limitation of this coverage is best understood by quoting the section of the law itself. Section 76, Clause A, is as follows: "'Injury' and 'Personal Injury' shall mean only injury by accident arising out of and in the course of the employment, and shall not include a disease in any form except as it shall result from the injury."

The injury must be by accident, and in addition must "arise out of and in the course of the employment."

It is easy to tell an injury, but it is at times most difficult to tell when an injury is by accident, and again it is often very difficult to separate disease from accidental injury.

Judge Artman, member of the Industrial Board, speaking before the Indianapolis Bar Association, said: "The question of greatest difficulty that has arisen in this connection is in distinguishing disease from an injury. You will note the language of the act expressly provides the injury shall not include a disease in any form except as it shall result from the injury. In other words, it does not include such diseases as epilepsy, apoplexy, heart failure and the like, and it may be said too that it does not include an injury which results alone from a disease and not from an accident. In other words, if a workman suffers an epileptic seizure, an attack of heart failure, or a stroke of apoplexy, and receives injury alone by reason thereof, the injury is not covered by the Compensation Act."

If you have held in mind the theory upon which the old system of law was founded, you have noted the change. Now the fault of the employer no longer plays its part, nor does the negligence of the employee. If the accident arises out of and in the course of the employment, he is entitled to recover, and the question

of negligence is entirely omitted, and the theory that industrial accidents are a part of the cost of production has been written into law.

In declaring this principle, the legislature has declared that accident prevention is of first importance, and that the compensation features are of secondary importance. In this connection I desire to again quote from Judge Artman: "There is a natural financial relation between accident prevention and compensation. They are veritable Siamese twins. When the obligation to render compensation for all industrial accidents arising out of the work is fixed, the employer naturally awakens to the fact that the cheapest compensation that he can provide is the eradication of all preventable accidents."

Some accidents received in the course of the employment and arising out of it do not entitle the injured to recover. This class of cases is covered by Section 8, which provides that no compensation for injury or death shall be allowed where the injury is due to the employee's wilful misconduct, including intentional self inflicted injury, intoxication and wilful failure or refusal to use a safety appliance or perform a duty required by statute.

Briefly, the compensation features of the act are as follows: The injured employee beginning with the fifteenth day of disability following his injury is entitled to 55 per cent. of his average weekly wage during the period of his disability, but not to exceed a period of 500 weeks, and in no event the sum of \$5,000. The law provides that the maximum weekly wage shall be considered to be not more than \$24 nor less than \$10. Hence the maximum weekly compensation recoverable is \$13.20, and the minimum \$5.50.

For certain specific injuries, and in case of death, a determined number of weeks' compensation is provided. I shall not attempt to enumerate them here, for it would doubtless prove tiresome, and a reading of Sections 29, 30 and 31 of the act will be of greater benefit to those interested. For illustration, however, of the provisions to which I refer, the law provides in event of death, 300 weeks' compensation, medical aid, and burial expense not to exceed \$100. If the accident results in the loss of amputation of more than two phalanges of a finger, thirty weeks' compensation and medical aid. In this class of injuries the period of disability is not considered, but the recovery is based upon the permanent impairment and loss suffered by the injured employee.

In addition to the money compensation payable, the employer is required to furnish immediately, free of cost to the employee, medical and surgical aid, hospital services and supplies, and

I shall shortly refer again to this feature of the law, for it is the one that is of primary interest to your profession.

Realizing that it would be valueless to provide compensation if it did not at the same time make certain the payment of same, the legislature inserted the provisions requiring all employers subject to the terms of the act to insure in some authorized company their liability under the terms of the law. The wisdom of this provision is obvious and needs no argument, for it does make certain the payment provided, giving to the injured workmen and to your profession not only the financial security of the employer, but also the security of the resources of his insurance carrier.

The law further provides that if employers desire to carry their own risk without insurance, they may make application to the Industrial Board for such permission, and the board may at its discretion grant same if it is satisfied after examination of the financial ability of the employer, and in the event such permission is granted, the employer is obliged to pay direct to his injured employees the compensation provided.

Referring to the medical aid provisions, I believe it is best to first read the law itself, and in later explaining these sections as I understand them, I shall use the term medical aid as embracing both surgery and medicine and also hospital treatment and supplies.

These provisions are contained in Sections 25, 26, 27 and 65:

Section 25. During the thirty days after an injury, the employer shall furnish or cause to be furnished free of charge to the injured employee, and the employee shall accept, and during the whole or any part of the remainder of his disability resulting from the injury, the employer may, at his own option, continue to furnish or cause to be furnished, free of charge to the employee, and the employee shall accept, an attending physician, provided, however, unless otherwise ordered by the Industrial Board, and in addition such surgical and hospital service and supplies as may be deemed necessary by said attending physician, or the Industrial Board.

The refusal of the employee to accept such service when provided by the employer shall bar said employee from further compensation until such refusal ceases; and no compensation shall at any time be payable for the period of suspension unless in the opinion of the Industrial Board the circumstances justify the refusal, in which case the board may order a change in the medical or hospital service.

If in an emergency on account of the employer's failure to provide the medical care for the first thirty days, as herein specified, or for other good reason, a physician other than that provided by the employer is called to treat the injured employee during the first thirty days, the reasonable cost of such service shall be paid by the employer subject to the approval of the Industrial Board.

Section 26. The pecuniary liability of the employer for medical, surgical and hospital service herein required shall be limited to such charges as prevail in the same community for similar treatment of injured persons of a like standard of living when such treatment is paid for by the injured person.

Section 27. After an injury and during the period of resulting disability, the employee, if so requested by his employer or ordered by the Industrial Board, shall submit himself to examination, at reasonable times and places, by a duly qualified physician or surgeon designated and paid by the employer or the Industrial Board. The employee shall have the right to have present at any such examination any duly qualified physician or surgeon provided and paid by him. No fact communicated to, or otherwise learned by any physician or surgeon who may have attended or examined the employee, or who may have been present at any examination shall be privileged, either in the hearings provided for in this act, or any action at law brought to recover damages against any employer who may have accepted the compensation provisions of this act. If the employee refuses to submit himself to or in any way obstructs such examination, his right to compensation and his right to take or prosecute any proceeding under this act shall be suspended until such refusal or obstruction ceases, and no compensation shall at any time be payable for the period of suspension unless in the opinion of the Industrial Board, the circumstances justify the refusal or obstruction.

The employer, or the Industrial Board, shall have the right in any case of death to require an autopsy at the expense of the party requiring the same.

Section 65. Fees of attorneys and physicians and charges of hospitals for services under this act shall be subject to the approval of the board.

Section 25, as I believe, means that for the first thirty days immediately following the injury the employer is bound to furnish at his expense all proper medical aid. That if the same is furnished, the employee is bound to accept same, and that refusing to accept same the employee is barred from the right to recover com-

pensation during the period of such refusal, with the proper protective provision, however, that such refusal shall not bar recovery if in the opinion of the Industrial Board the refusal was justified. This clause gives the injured workman at all times the right of a hearing upon the question of his refusal. It further means that if the employer desires to continue to furnish medical aid beyond the thirty-day period, that he has that right, and that the injured employee must accept and further that the obligation to furnish medical aid shall not terminate with the end of the thirty day period, if in the opinion of the Industrial Board the same should be continued for a greater length of time.

The last paragraph of this section wisely provides that in case of emergency, the employee shall have the right to call a physician, and that the services of the physician thus called shall be paid by the employer. The wording of this section is somewhat ambiguous, but the above I believe to be the correct legal interpretation of the section.

In this connection it is of interest to note in a legal sense just when an injury may be said to occur. Take an actual case that did arise. An employee was struck in the head by a hammer wielded by a fellow workman. At the time of the accident it caused no great suffering, and the employee did not stop work. Later, when an abscess appeared, necessitating surgical attention, the question of whether the thirty-day period began to run at the date of the accident or at the date the injury became manifest, became of importance. This question was brought to the Industrial Board for decision, and the board decided that under this section the thirty-day period began with the date of injury, and that the date of injury was the time when the injury became manifest, and not from the date of the accident, some fifteen or twenty days prior.

Section 26 defines the pecuniary liability of the employer for the medical aid he is required to provide. The section, as I believe, means that the fees to be charged shall be reasonable and proper fees charged by members of your profession in the community in which the services are rendered, bearing in mind that the services are being rendered to a man in the circumstances of life of the injured workman. I do not believe that the words "of a like standard of living when such treatment is paid for by the injured person" means that if the injured employee is in such poor circumstances as to be unable to pay any fee that you are required to give your services as charity. In such case it is my opinion that you are entitled to a reasonable

and just compensation for the services rendered. I might add here that there has come to my knowledge no case where services were rendered under circumstances such as above stated, where either employer or insurance company has asked or suggested that inasmuch as before the compensation law was enacted, such a case would be a charity case, that therefore no fee should be charged.

Section 27 provides that if the employee, during the period of disability is requested by either the employer or the Industrial Board, he shall submit at reasonable times to a physical examination by a physician selected by the employer or the board. It gives the injured the right to have present at such examination a physician provided and paid for by himself, and a refusal to submit to such an examination will bar compensation during the period of his refusal. It also gives the right of an autopsy in event of death.

This section also removes the rule of "privileged communication," and facts communicated to or learned by attending and examining physicians may be inquired into at subsequent hearings in which the question of the disability of the employee is at issue. I believe you will agree with me that this provision is a wise one, as it gives the Industrial Board your unrestricted assistance in determining the exact extent and nature of the disability suffered.

The last section pertaining to medical aid is Section 65, which makes the fees charged subject to the approval of the board. This has up to the present been interpreted to mean that in event of dispute, the question may be presented to the board, and the board does not, unless there is a disagreement of the parties interested, inquire into the fees charged. If, however, there does arise a disagreement, Section 66 of the law provides that the same may be presented to the board for determination.

HOWE S. LANDERS (following written paper): I would like to add a word as to the operation of the law for the past year. During the last year the board has handled 36,176 cases—from Sept. 1, 1915, to Sept. 1, 1916. We have had the assistance of physicians in most of these cases, and we find that the part the physician has to play is a most important part. The extent of the disability can be determined in a great many cases in no other way than upon the opinion of the gentlemen of your profession, and to a great extent the duties imposed upon you by this act are very heavy. For instance, the injured workman in a great many instances depends entirely upon the opinion of the physician in a case say where he loses the use of a

finger and his earning capacity now is just the same, but it must also be considered how much the loss will affect his future life—the percentage of impairment. The board needs your most hearty cooperation and assistance in determining these questions.

We have had some doctors suggest that the terms provided for the payment of physicians are not all they should be, but I think with a better understanding of the law the prospects are that your business will increase 75 per cent. more than it is now. The history of California will prove that. According to the statistics the cost of medical aid to citizens of this class before the Compensation Act went into effect was \$100,000; after the law had been established the cost was \$600,000.

The routine work of the board and the routine duties you have under the law are not great. We require a report which we must of necessity have. Otherwise we would not have the value of your findings at all. Some physicians have objected to this report, but I think when it is clearly understood there will be few objections.

I also wish to say that it is a pleasure for me to be here, and I appreciate your having asked me to come. One of the most pleasant things of the past year is that I have become acquainted with the members of your profession.

DISCUSSION

DR. JOHN H. OLIVER (Indianapolis): I consider this workmen's compensation law one of the greatest steps in advance that Indiana has taken. I do not believe the profession has yet begun to realize the depth of good which this law is capable of doing, not only to the employer, but greatly to the benefit of the employee, and much to the benefit of the laity, as well as the medical profession.

There is one thing in particular that it seems to me is of inestimable benefit, and that is in eliminating that pathological entity, the ambulance chasing lawyer. That individual is rapidly becoming extinct, and in that respect particularly this law is excellent.

There are some things that will have to be worked out—some that appeal to me. For instance, here is one point: A man comes up before the board, Mr. Landers, and the board after due consideration think this individual is entitled to thirty or fifty weeks, or whatever it may be. The doctor, according to the best of his ability, thinks this man will not be able to be on duty for say thirty to fifty weeks. Then suppose he is ready to go to work in ten weeks, what are you going to do about it?

MR. LANDERS: That should be called to our attention by the employer and that would end it. However, a specific number of weeks is given

only in the case of a man who suffers amputation, and that is not based on the disability but on the loss. The pay for disability ends with the termination of the disability, and the process of the law that takes care of that is that if the employer offers a workman suitable employment and he refuses to take the employment, his compensation stops.

DR. OLIVER: The only thing that I have been doubtful about is that this particular method of terminating payment might put a premium on malingering. When a man has a disability which lasts for twelve to fourteen weeks and he is ready to go to work in three or four weeks, human nature is such that he will stretch it to twelve or fourteen weeks if he possibly can. I have great respect for human nature. It is a good deal alike. If a man can get pay for ten weeks he is going to accept it whether he is able to work or not. The only remedy that occurred to me was this: Would it be better for the board to give them a lump sum? Take the amputation of a finger—would it be better to let him drag it out, or lump it and take it all at once, and let him use it as he wants to. A great many of these people if they get their regular pay every week will do nothing else for that time, but if they received it in a lump it could be invested, and then the man would begin to think about getting back to work again. I think that is a question that must be settled.

I want to say here that this Industrial Board as it is now organized, the secretary, board and all, is a very high class body of men. I am perfectly willing to submit to their honest decisions. Mr. Landers would have made a good doctor if he had put his mind to it, but he got switched off to the law—which is always reprehensible. But the board is a good board and I do not want to make any adverse criticism until the question is thoroughly investigated. I think we should stand by this board and help them out to the best of our ability.

DR. ALBERT E. STERNE (Indianapolis): This is a very important subject. As to malingerers, there will always be a few of those, and I believe that is a question that will play a minor rôle, for the reason that a capable workman will not be content with the 55 per cent. or less of his wages for a few weeks when he can earn 100 per cent. This does not put a premium on malingering except in the case of a few low-grade individuals.

I cordially stand behind the praise which Dr. Oliver has accorded to the board as such and to the work of the board up to date.

A question which I think is important is that of compensation for remote effects of injury. That is particularly true of injuries to the nervous system. You all know that is the most difficult thing with which we are confronted. There may be very little immediate effect from injury to the head or spine, but it will manifest

very severe lesions in the nervous system and cause a long-continued disability and very frequently a permanent disability, which results not only in his own incapacity but in extreme deprivation to this family. That is the one feature of the law, as I understand it so far, Mr. Landers, which has filled me with a good deal of doubt. Of course, these are the cases I see. Take a case where a man had apparently had a very slight degree of disability at the time of injury—that is particularly true of injuries to the head, where it takes weeks, or months, or years to develop a pronounced lesion of the nervous system. In the so-called neurasthenic type this is true, the actual focal degenerative lesions of the brain in particular. For that type of case we are rather unprepared, as I understand the rulings of the present law, and there should be, both for the safeguarding of the workman and his family and incidentally for the safeguarding of the medical profession, some reactional clause perhaps which would provide a proper remuneration to the individual who is injured and a proper degree of deference to the medical man's opinion as to the probable outcome of that injury to the man.

DR. GEORGE F. BEASLEY (Lafayette): I do not believe malingering would cut any figure. I have had a good deal of experience since that law went into effect, and every man wants to go to work as soon as he can. He does not get his 55 per cent. until after thirty days, and if he can squeeze in any work before that he always will.

As to paying a lump sum, I do not think it is a good thing. If you give him a lump sum he goes to work to spend it, and I think the weekly payment is much better.

DR. A. M. HAYDEN (Evansville). Patients come into my little hospital, sent in there by their employers, and we wait on them. After they get well we send in a bill and they say it is too much, and the accident company says: "If you make the bill right we will pay it." We always charge less for this kind of work than where the patient pays himself. We had a case where a man hurt himself on a soldering iron, and ten days after he came to me with an infection which required attention for thirty days. I looked after it, dressed it and took care of it for thirty-three days, and put in a bill for about \$31. Shortly after rendering the bill the insurance company wrote saying the bill should only be for thirty days, and after that we would have to look to the man for it. Another man came in with a shattered elbow. We kept him in the hospital for a week, spent three or four days taking Roentgen-ray plates, and then put his elbow in plaster; he came back for three or four casts and we sent a bill for \$91, and the insurance company sent it back saying it was too high. We even went so far as to say that we would leave it to three surgeons, and if they

said it was too high we would give them the bill, but they wrote back that they could not pay such exorbitant prices. The employer said he would not pay it unless the board ordered it. That is the way the matter is standing now.

DR. WILLIAM R. MOFFITT: We had a man who broke his thigh and was bruised all over, and we had him in the hospital for nine weeks. After he left the hospital and an attempt was made to collect the bill the insurance companies would only pay for thirty days in the hospital and thirty days care by the doctor. In a case like that, where a man injures his thigh, you cannot get the patient out of the hospital in four weeks, but the Compensation Act will allow pay for thirty days only.

DR. W. D. CALVIN (Fort Wayne): Last fall I listened to an address by Dr. Cabot and one by Dr. Murphy on the subject of state medicine, and I felt that they were advocating something that would take away the rights of the practitioner. I have thought of it a great many times since, and I find myself changing in sentiment. I am getting to believe more in socialistic medicine. I believe the time is coming, and rather rapidly, when the state will control the practice of medicine, and that we in the future—if we live that long—will become the employees of the state to take care of the people. This is a step in that direction. There are some things that may not be right in this law, but in the main it is right. The first man to be considered is the employee, and I think we can assume that he is defended. He is defended by relief from financial obligation and by the care he receives at the hospital and elsewhere. The next is the employer, and by making use of his insurance companies he is relieved to a certain extent of damage suits. Then the third party to be considered before we come to the physician, is the insurance company. When they passed around papers to sign up for this work I thought I could not do any of it, but quite a number of companies came to me. However, I do not receive the patients unless the injured man has an order from the company or his employer. If he has not such an order I must receive word from the employer over the phone. I have had no trouble whatever with these collections. Fortunately, I have had none of these thirty-day cases; ours have been of shorter duration. I have never paid any attention to the fee bill of the insurance company; I have charged what I would to other patients, and they have not objected. However, I believe we could conscientiously do this work for a little less than pay patients. Why? Because in the first place the pay would be certain, and also because many of these people for whom we render these services are among the class of people who do not pay their doctor bills.

I think whenever the insurance companies attempt to set our fees, it is time for us to call

a halt in that direction. They have no right to say what our fees should be; it is out of their province, and when we submit to that the next step will be that the people will learn of this and our fees will be crowded down even lower than they are at the present time. For that reason I think we ought to guard our rights in that direction.

DR. WALTER K. SCHLOSSER (Plymouth): This compensation law, if we follow it, will not fill our pockets, but yet I believe it is one of the greatest things that has ever come into the commercial world, because it does three things. First, it insures the employer, second it insures the employee, and third it is a safeguard to the honest, ethical business-man physician. One thing it will do—it will stop over-charging by physicians, and I believe it will stop under-charging. I think the thing for every physician to do is to get next to every man who employs men. This law I believe will make physicians into business men and put the medical profession where it should have been twenty-five years ago.

DR. B. P. WEAVER (Fort Wayne): There is one point I would like to have Mr. Landers explain, along the same line that Dr. Oliver has mentioned, and that is whether a lump sum cannot be given a man before the expiration of the full indemnity. I have a case in mind where a man sustained a fractured spine and pelvis. The board allows him full indemnity. He is a man with a family and needs all the earning capacity he has, of course, but his wages are small and he cannot live on the indemnity he receives. Is there no way by which that man can be given a lump sum settlement and allowed to go on being a useful member of society? I would let him sell shoe-strings or anything to keep him from being a pauper, a parasite on the community.

DR. EDWARD E. EVANS (Gary): I wish Mr. Landers would tell us about the thirty-day clause. When a doctor accepts a case, under the law as I understand it, he is bound to continue the care of the case until he is discharged or gives fair notice. Suppose he gets a man who could not pay his own bill and takes care of him at the company's expense for thirty days, then what is the proper procedure for the doctor, or can the board allow further compensation to the doctor, and if so, should notice be served on the board before that can be obtained?

HOWE S. LANDERS: In regard to malingering, I believe the Indiana law is as well planned as any in the United States for the prevention of malingering. The first thing we have is that the employer selects the physician. He has his own physician and watches the case. Then 55 per cent. of the average weekly wage—the rule for injuries—is no great inducement. In addition to that the employee cannot recover compensation beyond the time that he is offered employment suitable to his physical condition. If he

refuses this employment his compensation would stop. Then again, he must submit to examination by the physician selected by the employer at all reasonable times, then finally, the employer in case of disagreement may appeal to the board. I think with all these protecting clauses there is no great danger of malingering. Of course, the board might make mistakes in its determination, that is only human, but there would be no wholesale malingering.

As to the thirty-day clause, it is my interpretation that the board has power to extend it beyond thirty days, but I believe in order to be absolutely sure that the physician whose case needs more than thirty days' attention should write to the board explaining the situation—write us a letter with a report, give us the name of the injured and also the name of the employer, and ask us to extend the medical aid beyond thirty days. The board will then immediately investigate the case and make its decision.

As to the lump sum or weekly compensation, the compensation laws in foreign countries and in this country are founded on the weekly payment theory. The theory is that most workmen in factories are not skilled in the handling of funds, of sums of money of any size, and if the compensation were paid them all at once it might become dissipated, either from their own indiscretions or from those of other people, and they would soon be left probably still crippled and with the money gone. The theory of the law and the terms of the law require weekly payments. The board I think feels that the weekly payment is the proper way, and it does not favor lump sum settlements unless there is very good reason shown for lump sum payment.

In answer to Dr. Weaver, I think it is possible to get a lump sum settlement by appealing to the board. If a workman suffered a loss for which a set sum is payable and he will come to the board after twenty-six weeks have been paid him, the board may then at its discretion grant the lump sum. But before twenty-six weeks have passed and without the agreement of employer and employee, the board cannot make a lump sum settlement, excepting in the case of permanent injury to a minor, who may ask the board for a lump sum at any time. The law provides for the appointment of a trustee to handle the money for a minor.

If an injury occurs and later results become manifest, the disability which results from the accident would have to be left to medical authority. If the disability occurred at a remote date there would of course have to be proof that it was the result of the accident, and the claim would have to be made within the two-year period of limitation. A claim after two years would be barred.

DR. STERNE: Mr. Landers, under the interpretation of this act would such an injury to the nervous system as being overcome by in-

tense heat during employment be classed as an injury?

MR. LANDERS: I cannot answer that from any decided cases, as we have not had any contested cases; but I can tell you what seems to be the weight of authority in other states where such questions have been decided, and that is that if a man's work exposes him to greater hazard from sun-stroke than the general public is exposed to, then it would be an accident within the meaning of this law. I do not give that to you as the decision of the Indiana board; that seems to be the weight of authority in other states.

DR. HAYDEN: Suppose a bill is sent in to the insurance company and it refuses to pay it, and the bill is then sent to you, what evidence would have to accompany that to prove it was not an unusual bill?

MR. LANDER: Unless the physician wished to come to Indianapolis, or would wait until the board came to his city, he should send with his complaint the deposition of some physician in his community as to the reasonableness of the charge. In that way the board could pass on it without requiring the physician to be present.

DR. STERNE: Do you think it advisable to appeal to the board at any time, or place the matter in the hands of an attorney?

MR. LANDERS: Of course, the doctors would have to decide that for themselves. The board is willing at all times to be of any service it can, and while the doctors may engage an attorney if they wish, it is not necessary.

DR. E. M. SHANKLIN (Hammond): I know an insurance company, and I know their fee for a certain kind of work is about 25 per cent. of my usual charge. I know this injured party that comes to my office is covered by that liability company. Now if I call up the corporation, the employer, and explain to them that I am working for the corporation, not the insurance company, and explain why I tell them this, then have I not the right to expect the corporation to see that I get the proper fee for that work?

MR. LANDERS: The party that is primarily liable to you is the employer. The insurance company figures in simply by its contract with the employer. The employer is not relieved by the insurance company. The insurance company merely represents him as backing, but whatever the employer would contract with you would bind the insurance company. The matter that controls your charge is not the insurance company's fee schedule, it is the law itself. I have explained the provisions covering fees.

DR. HAYDEN: Under that would I have a right to sue a party who employs me to recover a bill?

MR. LANDERS: The law does not do away with a contract between individuals. If the employer contracts to pay you, you have a right to recover.

THE DIAGNOSIS IN CERTAIN GASTRIC DISORDERS *

HUGH MILLER
SOUTH BEND

Those whose work brings them much in contact with diseases of the digestive apparatus cannot help but be impressed with the very great importance of determining early and exactly the source of trouble in all intra-abdominal disturbances. It is a fact that requires no argument for its proof, that the longer any chronic disease exists, the poorer becomes the prognosis, and this applies to no system of organs with greater force than to the gastro-intestinal.

It is true, too, that in no field of medicine is early diagnosis more difficult than in the one under consideration. The men with the greatest experience in gastro-enterology are still unable to make exact diagnoses in not a few of their early cases and remain in doubt very often until the question is settled by the exploring surgeon. The special workers in this field are by no means agreed even yet as to the proper classification of the abdominal diseases and it still remains complicated and unsatisfactory.

On the other hand it cannot be denied that there is too great a difference between the number of correct early diagnoses made by the gastro-enterologists and those made by the average physician. This may be a good thing for the specialist, but it is a very bad thing for the patients inasmuch as the great bulk of them go through the hands of a number of general men before reaching the special man.

It seems to be true then that in the most expert hands and with every means of diagnosis utilized a certain number of mistakes are unavoidable. At the same time it is equally true that a considerable number of avoidable mistakes are being constantly made to the everlasting detriment of the patients concerned. These avoidable mistakes furnish us with our problem. Why are they made? I believe the tendency to look for textbook or typical pictures is responsible for many of the mistakes. An effort is made to make the case fit into some classification rather than to construct a pathology that will satisfy the symptoms. Textbooks of necessity describe conditions as they exist in the well developed cases, while pathologic states which are slow in their development produce, early, only indefinite atypical clinical pictures. Consequently if we are to locate the source of trouble before it is well advanced we must not wait for a fully developed symptomatology.

Another common source of error is the failure to get in all of the evidence by utilizing every one of the approved diagnostic methods. If one studies the work in abdominal diseases in different clinics he finds that while the men in one place are seeking light along new lines of research that are not considered in another there are certain methods that are accepted by all as absolutely essential in arriving at a diagnosis.

By all means the most important of these are a carefully written history and a painstaking, systematic physical examination. If one were to be deprived of every other means of investigation and used these to the best advantage he would still be master of the situation in the vast majority of cases. These two methods are more reliable than all others combined; they have the great advantage of being simple and inexpensive, and they are just as available in the middle of the Sahara as in New York or Chicago. To be of the greatest value the history should be written, and written according to some definite plan. To record facts in this way on paper helps wonderfully in arranging them in proper order in the memory. A fountain pen and a piece of paper are wonderful instruments of percision if properly wielded. The physical examination must be searching and to make it so some system must be followed. It is not sufficient even in the apparently simple cases to confine the examination to the abdomen itself. It is surprising how much valuable information can be gotten from routine examinations of the whole body. Information that can be used to great advantage not only in arriving at a diagnosis, but in prescribing treatment. If the examination is not made according to some comprehensive system important points which might decide the issue are easily overlooked. In this connection I am reminded of a case which will well illustrate the point. A young girl of twenty-two recently presented herself complaining of indefinite stomach symptoms for which she had been treated for some time without any relief. A pelvic examination revealed a large symmetrical mass in the pelvis which resembled greatly a pregnant uterus, but I decided that it was a neoplasm, probably a well filled cyst, and sent her in for surgical relief. Operation revealed an enormous fibroid, which was removed by hysterectomy. The patient's stomach symptoms, which had been quite troublesome for some time, disappeared promptly and have not bothered her since.

The Roentgen-ray examination has now come to rank next in importance as a diagnostic

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method in this line of work. The light it has thrown upon many of the problems in the physiology and pathology of the gastro-intestinal tract in the last few years is indeed wonderful and one cannot afford to neglect its use if he takes his work at all seriously. It should be remembered, however, that the possession of a splendid Roentgen-ray outfit does not make a roentgenologist any more than the possession of a stethoscope makes a heart specialist, or a speculum a gynecologist. Almost any office girl can soon master the ordinary technic of making pictures, but the interpretation is an entirely different matter. This is a comparatively new field not once ploughed over, with so many new developments every day that to keep apace the workers must of necessity devote practically all of their time to it. Such men are appearing now in almost every community and they should be encouraged and supported, for the sooner they become expert the better it will be for all of us.

The one objection that can be urged against a Roentgen-ray examination is its cost. The laity have not been taught to appreciate the difficulties that attend the working out of a diagnosis in so many cases, and so are often unwilling to pay a reasonable fee for what is really the most important service rendered them. Within a year I had a patient whom I treated for some time for ulcer of the pylorus with indifferent results. I had not had a Roentgen-ray examination because the diagnosis seemed clear and I was anxious to save the patient the added expense. It finally became necessary to operate and the pylorus was found adherent to an inflamed gallbladder, a condition that could have been revealed months before by a roentgenologic examination and the patient saved a long period of disability and discomfort.

There is a temptation when one has a roentgenologist close at hand to rely too much on the evidence he furnishes. It should always be borne in mind that the Roentgen-ray examination is only a part of the whole and not the most important part either.

In any condition presenting stomach symptoms the examination cannot be considered complete without laboratory tests of the stomach contents and stools. The classical test of the activity of the gastric juice is an analysis of an Ewald breakfast recovered after 45 or 50 minutes, and until recently a great deal of dependence has been placed on the evidence thus obtained. Experimental and clinical investigation made in the last few years, however, seem to indicate that the information so furnished is of doubtful value. The work of

Rhefus and his co-workers, for instance, has demonstrated that several meals must be taken at different times in the individual case before conclusions can be drawn as to the chemistry of that particular stomach. Pavlov has shown that there is a curve of secretion that is the same under the same conditions but varies with varying conditions. Clinically it is necessary to get some idea as to the curve of secretion and it is necessary therefore to make several examinations at different times in any case.

The comparative inaccessibility of the intestinal tract and its adnexa, the liver and pancreas, has made it difficult to determine their pathology in any satisfactory way. Through the work of Cannon and his helpers the whole subject of the motor activity of the alimentary canal has been brought from darkness into the light and the information is being utilized every day in clinical medicine. Much, too, has been accomplished in the last ten years in standardizing methods for testing the intestinal contents until today we can obtain a great deal of accurate information of great practical importance by careful examination of the stools. In spite of this fact it is a method seldom resorted to outside of the larger clinics and hospitals. That the examination of feces is repulsive cannot be denied, but it is true that if properly used as a part of one's routine it will yield such interesting and valuable information that the natural repugnance felt at first will soon be forgotten.

After having used every method of any value the diagnosis will in many cases remain in doubt. The evidence will appear conflicting and even with the most careful study it will be impossible to work out the puzzle. What then is there to do? The easy way out is to treat the case symptomatically and await developments, but I am sure that it is neither the fairest nor the best way for the patient. Early exploration is the answer, I believe, in a majority of the cases. The sooner we realize the limitations of our diagnostic ability and the sooner we develop the habit of sending these doubtful cases in for early exploratory laparotomy the better. Such explorations call for the highest degree of surgical skill so that the maximum amount of information may be obtained with a minimum of traumatism in the least time. It is entirely a question of skill and conscience, the matter of generosity in sharing the fee not entering into the question at all. The close association of the careful general practitioners with such surgeons in the working out of the diagnostic problems under consideration will mark a great step forward. There has been too much controversy and not enough cooperation

between internists and surgeons in regard to these borderline cases, and as a result not only themselves but their patients have suffered, and the progress of medicine has been stayed.

It takes courage, of course, to admit to a patient that after making all sorts of tests and examinations the diagnosis is still in doubt and to urge an exploratory operation as the only means of settling the question, especially when the patient is convinced that there has been too much time spent in preliminaries already. It will often mean losing the patient, for a time at least, but there are worse things than losing a patient under such circumstances. One should be fortified in his position by the knowledge that he is right and that because of his thoroughness no one else can arrive any nearer a correct diagnosis than he has without an exploration. If the patient does leave to seek the advice of a less careful but more comforting practitioner be sure that he will come back, for while relief may be secured for a time from almost any form of treatment, quack or regular, Christian science or chiropractic, the disease is making steady, though perhaps slow, progress, and the wiser though sicker patient will usually return to his honest counsellor.

It is not the purpose of this paper to discuss in an exhaustive way any of the conditions manifesting themselves in disturbances of the digestive system, but rather to make a few general observations on the diagnosis or some of the more common intra-abdominal diseases met with in everyday practice.

The early diagnosis of cancer of the stomach is seldom easy and often exceedingly difficult. To find a reliable method for its early recognition is one of the greatest problems before the medical profession today. At least one-third of all cancers occur in the stomach and since the only hope of cure depends on early detection and operation the need of such a method is obvious. No such method has been devised, however, and it is still necessary to put the patient through the whole series of examinations as in the past. Efforts are constantly being made by laboratory workers to find a specific test for stomach cancer, and every year at least one is offered to the profession, but up to the present they have all been found wanting. Probably early diagnosis of this lesion can be made best by the Roentgen ray in the hands of an experienced man. Carman states that in the Mayo Clinic 95 per cent. of gastric carcinomas are diagnosed by this means. It is true, of course, as Carman says, that this is "a percentage which is not approached by any other means," but it must be remembered, too, that it represents a degree of perfection that the

average roentgenologist cannot hope to attain to because there are very few who have the advantage of such a wealth of material as is furnished at Rochester. However, it is still true in general that the Roentgen ray is the most reliable means of detecting early stomach cancer. In June of last year Bloodgood reported on 184 cases of carcinoma of the stomach observed in the pathologic laboratory at Johns Hopkins during a period of twenty-five years. From 1890 to 1905, 75 per cent. of the cases were inoperable; from 1905 to 1910, 84 per cent. were inoperable, while in the period from 1910 to 1915, the percentage of inoperable cases had fallen to 61. The improvement is a cause for rejoicing, but the figures as a whole are disheartening. Why are there so many inoperable cases? First, because many stomach cancers are symptomless until well developed; second, because the laity have not been taught to recognize the early symptoms; and third, because many medical men are still unable to appreciate the fact that symptoms of digestive disturbance persisting for any length of time mean something and always call for thorough investigation. The diagnosis of nervous dyspepsia is still made too often where cancer is really the source of trouble. I don't deny its existence, but as O. Henry says, "we must have a concrete idea of anything before we can comprehend it," and for that reason few men have been able to comprehend nervous dyspepsia, and I insist that it is neither safe nor wise to diagnose a condition that is beyond one's comprehension.

It is in suspected cancer cases that we have the most urgent need for exploratory operations. It is nothing less than criminal for us to allow such patients to escape without having put before them in as graphic a way as possible the exact situation and then urging exploration with all the force at our command. As Barker has well said in this connection: "In positive cases, believed to be early, and in cases suspected to be cancer, though not demonstrably so, immediate surgical exploration should be advised."

It is reasonable to believe that many ulcers of the stomach and duodenum go undiagnosed. Acute ulcers and the uncomplicated chronic ones are usually easy to detect, but by no means all of them come in these two classes. Ulcers may be large or small, single or multiple, and nonindurated as well as indurated. Further, they may be located at any point in the stomach or duodenum, though, of course, many more are located at the pylorus than at any other place. In view of these facts one would expect that

the symptoms of ulcer would vary greatly and that is exactly true. To further complicate matters it is not uncommon for ulcer to be accompanied by cholecystitis or appendicitis or both.

It is undoubtedly true that many of the cases of so-called chronic dyspepsia are really cases of ulcer. Of the cases of ulcer operated at the Mayo Clinic the average duration has been twelve and a half years. Had these cases been diagnosed early many of them could have been cured without operation, and I believe that quite a proportion of them could be diagnosed in spite of all the difficulties if only enough time and care were given them. Sour stomach, heartburn, fullness after eating, discomfort of any degree are symptoms that call for investigation rather than for soda, or charcoal, or the ready-made antidyseptics of the pharmaceutical houses. They are symptoms common to many disorders but they mean *something*.

The tendency is still strong to diagnose gallstones with the idea that the stones are the essential feature in the pathology, while, as a matter of fact, the condition of the gallbladder, ducts and liver is the great question. Not only patients, but many doctors feel disappointed if the stones are not forthcoming at operation and they are inclined to feel that the surgery was uncalled for, while if five hundred stones are delivered the rejoicing is five times greater than if there were only a paltry one hundred. If more time were spent in studying the condition of the biliary apparatus and less in counting stones it would be much better for the patients.

A mistake that is constantly being made at operation is to give a clean bill of health to gallbladders that empty easily and whose serous coats look normal. Many cases of mild catarrhal cholecystitis are thus overlooked and the patients continue to have their dyspeptic symptoms. We have been slow to appreciate the frequency of chronic cholecystitis though it is being recognized more often now than formerly. These mild cases produce few symptoms that are characteristic and hence are difficult. The patients suffering from this disease usually have discomfort rather than pain, flatulence, a muddy complexion, and often a slight rise in temperature more or less regularly without any loss in weight. All the symptoms are comparatively mild, they are apt to come on rather suddenly without apparent cause, and bear no relation to the taking of food. The attacks, which usually last from 24 to 72 hours, disappear, with or without treatment, about as they come. Tenderness may be elicited depending, of course, on the degree of inflammation and on the accessibility of the gallbladder. Though it is difficult to understand why obesity should predis-

pose to gallbladder disease, nevertheless it is true that fat women are particularly liable to develop inflammation of the gallbladder and in them it is especially difficult to apply pressure below the rib margin and so the tender point escapes the examiner. It is probably not justifiable to make a positive diagnosis in these mild chronic cases unless tenderness is found over the gallbladder, except when all other possible causes are excluded after having the patient under observation for some time.

When exposed these gallbladders look normal but on removal they show a reddened mucosa, dotted yellow due to erosion of the villi—the so-called “strawberry” gallbladder described by MacCarty. Microscopic examination shows that the epithelium is destroyed more or less completely and is replaced with scar tissue. Such a condition when undiagnosed and untreated usually progresses, more and more tissue is involved, the gallbladder becomes hopelessly damaged, and too often serious complications ensue which menace the life of the patient.

Finally, I believe that the following conclusions are warrantable:

1. Early diagnosis of intra-abdominal diseases is difficult.
2. Notwithstanding the difficulties early diagnoses should be made much oftener than they are.
3. Most of the failures in diagnosis are due to carelessness in not getting in all of the evidence and then considering it as a whole.
4. Exploration should always be considered when the diagnosis remains in doubt after every other means has been used to make it.

DISCUSSION

DR. A. B. GRAHAM, Indianapolis: I desire to express my appreciation of this very timely paper which Dr. Miller has presented to us today. In twenty-two years' experience in the practice of medicine, eighteen of which I have devoted almost exclusively to the study of gastro-intestinal diseases, and during part of which time I have been filled with enthusiasm regarding the making of a diagnosis, I wish to state that I appear before you today after reviewing the many mistakes which I have made in diagnosis, as a “neutral.” Twelve years ago I presented a paper before this body on the subject, “A Plea for More Conservative Surgery in Diseases of the Stomach,” making a plea for more thorough study by the internists, and only last week I heard Dr. Crile say that most of our gastric surgery is due to insufficient cooperation between the internist and surgeon. We all know how the surgeons criticize us as medical men, and how the medical men criticize the surgeons—both correct in a certain sense of the

word, and yet both incorrect—not giving each other their just dues. I firmly believe there are many surgeons who do not study gastro-intestinal cases sufficiently well, who are not following the advice set forth in Dr. Miller's paper—careful percussion, careful physical examination, careful analysis of the stomach contents, as well as Roentgen-ray examination. It is a practice with some of the surgeons in my city to find a patient in pain, complaining of gastro-intestinal symptoms, make a superficial examination in the office in the afternoon, and operate the next morning. Some of these operations relieve the patient, but in my experience a large percentage of the cases that we have to treat from a gastro-intestinal standpoint are cases that have undergone surgical operation. And when the patient is unable to tell the nature of the operation nor the number of organs which were removed, the only thing a man who is trying to study the case can do is to refer them back to the surgeon to try to improve their condition.

In the consideration of every disease of the gastro-intestinal tract that presents itself for study we have to determine one of two things: Are the symptoms which are presented indicative of a primary disease of the stomach, or are these symptoms secondary to some disease remote from that particular organ? For example, take the interrogation of patients. I find more and more that I make mistakes from interrogation of patients. It is an exceedingly difficult thing in some of these cases to secure a satisfactory history from a particular individual on the first examination. The same is true of our physical examination and chemical tests. I have been severely criticized for making repeated chemical tests on every individual that present himself to me complaining of any symptoms whatever of the gastro-intestinal tract, but I hold that a man is well repaid if he will make a routine practice to make tests in every case. It is useless to treat a case on the symptoms which are presented to you unless you also make a chemical examination. A patient may have a highly acid condition, and it is up to you to determine what causes this condition. It may be due to increased secretion of hydrochloric acid, or a decreased secretion. It has been my experience that in some cases the symptoms are similar.

Dr. Miller makes an important point when he says that because a man owns an Roentgen ray apparatus does not mean that he is a good roentgenologist. I am firm in my conviction that a man who does Roentgen-ray work should be a man who gives his entire time to the study of that particular method of diagnosis; that after an internist has studied his case up to a certain point and wishes to refer it to the roentgenologist, he should go with that patient to the roentgenologist and study the case at

the same time. I make it a rule in every case where it is possible to follow the case to Dr. Cole's office and not only try to verify my findings but also try to learn to interpret these pictures. The interpretation of these pictures is a most valuable asset in diagnosis. You may have all the typical symptoms of gastric or duodenal ulcer; some surgeon is called in and makes a diagnosis of chronic appendicitis, which may produce almost the same gastric findings. The patient is taken to a hospital and operated on, the surgeon believing it is appendicitis and you believing it is gastric or duodenal ulcer. Do not let the surgeon put it over you stopping with the removal of that appendix. If you think the patient has an ulcer make him explore that abdomen thoroughly in order to determine whether you have been mistaken in your diagnosis.

That is where we are making our mistake—insufficient cooperation between men—severe criticism of each other instead of getting closer together, working hand in hand, trying to avoid the mistakes which we are making as single individuals. We must work together—surgeon, internist and roentgenologist, and I think the Roentgen ray is the most valuable method of diagnosis that we have in diseases of the gastro-intestinal tract.

DR. MILES F. PORTER, JR., Fort Wayne: I really cannot add any thing to what Dr. Miller and Dr. Graham have said, but there are two things that very few doctors practice, and one is history taking. History taking is hard, little understood and very rarely practiced. We see very few case reports where the history is really complete. I take very few histories that I consider complete when I am through. It is done too hurriedly. If you have never done it, it is a good plan to try taking a history a week or ten days after the first time. It does not sound like the same history, and yet the patient is the same and the doctor is the same.

Three years ago a patient came to Dr. McCaskey's office with a history of gastro-intestinal symptoms. An examination was made and the usual laboratory and chemical tests followed, blood analysis, urinalysis, etc. Three years later she was found to have pernicious anemia. Her brother is a doctor—he takes the history and says she evidently had that when she was coming to us, that the history very clearly shows that. So I took her history, changed the sex of the patient and read it to the doctor and asked him what the patient had—and he guessed everything imaginable except what the woman did have. Was the history incorrect then or now? Clearly the symptoms are not the same now as then. The question of whether or not she has pernicious anemia is not the important one, but it is a question of whether the history was taken carefully enough to indicate it. I hold that a history should be

taken every few days, and you will find it changes and you will have to change your opinion. That is absolutely true in almost every case. How frequently a patient tells you when you make some chance remark, "Oh, yes, that is true, but I did not think that was important." There are too many points to cover in a single taking of a history. In the case of gastro-intestinal disorders I would rather have the history taken satisfactorily than anything else. I think next I should prefer the Roentgen ray; third, I should prefer to have the laboratory findings, and fourth, the physical examination. There are certain types of gastro-intestinal disorders of which I would not say that, but as a whole that is true.

I think it would be a fairly safe rule in the majority of gastro-intestinal disorders of the subacute or chronic type to go through, make your diagnosis, make your plans for what you are going to do, and then start all over again. How often do we find this sequence? A patient has chronic symptoms with acute exacerbations. A diagnosis of appendicitis and gallbladder trouble is made, the appendix is removed, the patient sent to bed and relieved completely and a cure is supposed to result. In four months she comes back with the same symptoms. They still insist that it is gallbladder disease, diagnosis agreed on by both physician and surgeon. They drain the gallbladder this time and for six months she is relieved. The woman comes back the third time. The appendix showed some evidence of abnormality and so did the gallbladder, but the diagnosis was not correct and the treatment was not correct in either case, and the woman still had the difficulty producing gastro-intestinal symptoms. She undoubtedly will have her chronic trouble and acute trouble until a more careful diagnosis is made than has been made, and perhaps until the gallbladder is removed.

DR. F. W. FOXWORTHY, Indianapolis: It will be almost impossible to add to Dr. Miller's paper, but it has been my fortune to run into a good many stomach and bowel cases in the last few weeks, and I have been somewhat impressed by one thing, and that is the efforts of the surgeons of the United States Army to try to prevent these diseases by correction of diet, so they do not have to make this diagnosis. To explain my point: In a regiment of 1,000 men our medical sick call may have from fifty to fifty-five men, and you have to make a diagnosis in each case, and usually it must be done very quickly, the idea being that the doctor shall separate the sheep from the goats so as to know who shall go on duty and who to the hospital. Of course, there are some about which there is no question of diagnosis and you can examine them later. If we find we have too many cases of diarrhea, we have to make a special report as to why we have this. The burden is placed on the surgeon if the man has the disease. I think the future

of gastro-intestinal diseases will show that the specialist will try to prevent the condition as well as to make a correct diagnosis.

It is not the best plan to resort to an exploratory incision the first time you see a patient. It seems to me a criticism on your ability to diagnose the case. Dr. Miller did not say the first time, but he emphasized that point. I think it should be the last thing instead of the first.

DR. GEORGE W. MCCASKEY, Fort Wayne: This is a very large subject, but two or three points I should like to refer to. First, the importance of examination. We do not spend sufficient time in taking the case history. It is a fact that we are hurried and pressed for time, we hurry to get through and do not put sufficient time on these examinations. I have never known my first history in any case to be really complete. I do not recall a case in which at some subsequent interview some point did not come up that would have come up the first time if the interview had been sufficiently prolonged. Of course, it should all be written. It is ridiculous to do anything else. I have done this practically all my life. I have all my records for more than thirty years and it is not an unusual thing—here is the value of a written record—to have patients come back into my office ten or fifteen or twenty years later and I go back to the old record and show it to the patient. It has a good moral effect on the patient.

I should like to urge that there are certain things that should absolutely be made routine. The cell count should be taken, and we make fecal analysis a matter of routine in every case that comes to me. Nineteen times out of twenty we do not get anything, but when we do we find it is something important.

DR. H. H. MILLER (closing): I will not take more of your time. I just want to say in closing that it is necessary in every case to get all the evidence and consider it carefully, and in many cases go over it time and again. In no case allow a patient to hurry you in making your diagnosis.

THE NECESSITY OF COORDINATING METHODS IN THE DEFINITIVE DIAGNOSIS OF PULMO- NARY TUBERCULAR LESIONS *

F. B. WYNN, M.D.
INDIANAPOLIS

In the early history of laboratory methods the attitude of the professional mind was that of skepticism. In a few years laboratory methods

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won their way to a position of respectable acceptance, but there remained a very general feeling that while they were interesting in a scientific sense, they possessed but little practical value in their bearing upon medicine. We have now reached a phase in the evolution of the laboratory where not only its practical usefulness is acknowledge, but such general credence in laboratory findings has developed that even laboratory men themselves protest and shout a warning.

The earliest to accept laboratory diagnosis were the surgical pathologists, basing judgment upon the researches in cellular pathology. Was it a neoplasm, the surgeon submitted a minute fragment from the growth, saying: "I do not know what it is. You tell me and I shall be governed accordingly." The whole burden of responsibility for diagnosis and treatment was placed upon the pathologist, often forgetful of the possibility that the microscopic particle submitted might not represent the fundamental lesion responsible. A little later, with the discoveries of bacteriology, still greater burdens were placed upon this branch of laboratory science. Was it suspected tuberculosis, diphtheria, pneumonia, gonorrhea, or syphilis, the microscope and culture tube must settle the question. And now we have reached the interesting and valuable group of serological tests, and upon them most onerous burdens are being placed by practitioners of medicine and surgery. Equally interesting and instructive are the revelations coming through physical laboratory methods. The knowledge obtained through the Roentgen ray has been so marvelous oftentimes, that it is not strange to have overzealous radiologists making unwarrantable claims for its efficacy in diagnosis; and just as often practitioners rely upon this "short cut" to diagnosis, neglecting the time-honored methods and defeating the broader ideals in diagnostic procedure.

Turning from this brief survey of "short cut" methods in diagnosis, to particular diseases in which this same error has been committed, we find pulmonary tuberculosis most sinned against.

With the discovery of the Koch organisms and the ready means in the laboratory of identifying the organism, a priceless boon was conferred upon the profession. Everywhere state, municipal and private laboratories have sprung up, in which most competent and extensive work is done. It is not fair to them, however, that the practitioner should place upon the laboratory the whole burden of responsibility in diagnosis of tuberculosis. Let him exhaust

every other available means to determine the truth, and remember always the fact that not one but many examinations of sputum may be necessary to demonstrate the presence of tubercle bacilli. Carefully applied, it does offer an absolute means of diagnosis in a majority of cases. On the other hand, negative reports have often led practitioners to give patients unwarrantable assurance that tuberculosis does not exist. The golden period of incipency is allowed to slip by without proper regimen being instituted. It is in the pretubercular state, or incipient stage of the disease that the laboratory is most apt to fail us. This is no reflection upon laboratory methods. Negative reports for tubercle bacilli in such cases only indicate that the tuberculous process is yet dry; that mixed infection and tissue destruction have not as yet converted a closed process into an open one, with discharge of organisms in the sputum. Every large laboratory frequently receives oral and written communications of this import: "Here is a sample of sputum. I do not know whether the patient is tuberculous or not. I want you to tell me." Upon negative report the patient is lulled into a sense of false security. He has not been dealt with fairly unless every other means has been employed to ascertain the truth. It is in just such cases that careful clinical methods are of greater value than the laboratory.

In this connection it should be remembered that in some cases of pulmonary tuberculosis, especially fibroid phthisis, the bacilli lose their acid-fast properties and will not stain. In such cases the Much granules should be searched for.

Not only should the sputum be examined repeatedly and painstakingly for tubercle bacilli, but search should be made for other organisms which may give rise to pulmonary conditions simulating tuberculosis. These would include the influenza bacillus, which often occasions a chronic bronchitis; the aspergillus organism, which produces a clinical picture resembling pulmonary tuberculosis; leptothrix bacilli, which are acid-fast and produce lesions quite similar to those caused by the tubercle bacilli. These pseudotubercle bacilli may cause local but not general toxic manifestations. Hence careful clinical study of the case or guinea-pig inoculation, may be necessary to settle the diagnosis.

Soon after the bacillary method had won its way to professional esteem, another series of "short cuts" to the diagnosis of pulmonary tuberculosis came into vogue. Each of us has with enthusiastic expectation run the gamut of tuberculin tests—the subcutaneous, the von

Pirquet, the Calmette and Morro tests. Larger experience in their use is proving that they have positive clinical value in children. In adults they possess negative value, absent reaction indicating in doubtful cases the probable absence of tuberculosis; but even here it should be borne in mind that in the terminal stages of the disease when antibody formation is slow, and in miliary or rapidly progressive tuberculosis, the reaction may be negative.

The subcutaneous injection of tuberculin for the diagnosis of bovine tuberculosis works admirably. Diagnostic injections of tuberculin in human beings are dangerous, and in the judgment of Sahli are to be discouraged. They may light up to a dangerous extent a latent process.

The complement-fixation test has recently been applied in the diagnosis of tuberculosis, but its usefulness and reliability are yet to be demonstrated. For the purposes of this paper, its consideration is not required.

The introduction of the Roentgen ray aroused high hopes as to its efficacy in the diagnosis of pulmonary tuberculosis. To visualize intrapulmonary lesions in the same manner as broken bones, was not an unreasonable expectation. The ultra-enthusiastic were quick to make claims for extraordinary results. It was but natural that many should forsake the orthodox route to diagnosis for this new "short cut."

There can be no doubt about the great value of skiagraphy in discovering changes in the intrathoracic viscera which formerly escaped recognition. Such, for example, are pleural adhesions; tuberculous bronchial glands; circumscribed effusions and empyema; localized pneumothorax; lung cavities, gangrene and abscess. The revelations of the Roentgen rays in the chest are essentially anatomical. To this extent they are extremely valuable. But skiagraphy fails to reveal the catarrhal bronchitis or the pulmonary infiltrations which constitute the progressive territory of the disease. The value, therefore, of skiagraphy in the early recognition of pulmonary tuberculosis does not equal the older if less fashionable clinical methods.

Many sources of error exist in the reading of Roentgen-ray plates of the lung. In incipient cases the proper interpretation of shadows, "mottling," "ground glass" areas, "radiating lines," etc., is difficult. These may only signify the scar tissue of healed pleurisy; the pulmonary anthracosis so common; the calcification of healed tubercle, or the scar of a healed inflammatory area—all processes of no serious import to the patient, because not active. Certainly the Roentgen ray seldom warrants the diagnosis of a tuberculosis process, without the

support of clinical evidence obtained by careful study of the history of the case, and a physical examination. In fine, the Roentgen ray taken in conjunction with other methods, becomes a most valuable aid in the definitive diagnosis of pulmonary tuberculosis.

There remains for consideration only the time-honored methods—history taking and physical examination, conjoined with a clinical study of the case. The brilliancy of laboratory methods has cast a shadow over the old ways. Fascinated by the new and dramatic, we are often prone to take the aeroplane route to diagnosis, rather than plod along the old road, although the latter may be a safer, perhaps the only, way in many instances.

A careful study of the possible sources of infection, due consideration of the mode of life and previous diseases, and careful analysis of the development of the complaint will often give a clue to diagnosis when laboratory methods fail. As with history taking, so will the clinical study and repeated physical examination of the patient reveal fundamental and all-important knowledge which the laboratory cannot give. They will often reveal convincing knowledge of incipient or progressive tuberculous disease before the Roentgen ray shows infiltration or the microscope reveals the tubercle bacilli. In our ardency to be modern and up-to-date let us not forget these older methods, even if less dramatic. Not by "short cuts" alone, but by every possible avenue of approach should we seek the diagnosis of pulmonary tuberculosis—not in the narrower sense of merely proving the existence of the disease in a particular case, but in the broader sense, we should by every possible method seek to determine the metes and bounds of the pathologic process; its activity or latency; the reaction of the organism to the invading foe; the potentiality or weakness of the individual in the combat—all to the end that those measures may be instituted which will arrest or cure the disease.

If tuberculosis is the greatest foe of the human race against which we are waging relentless war, then we may speak of it in terms of battle. Like the aeroplane, the microscope and Roentgen rays are the reconnoitering agencies through which we gain most valuable knowledge in locating and naming the enemy. But reconnoitering does not win the battle. There must be bombardment from the heavy guns of physical examination, and in the trenches of clinical study close to the foe will be fired the shots which will dislodge the enemy and bring the victory.

THE ROENTGEN-RAY DIAGNOSIS IN PULMONARY TUBERCULOSIS *

R. C. BEELER, M.D.
INDIANAPOLIS

Roentgen-ray examination is only one of the methods used in diagnosing pulmonary tuberculous lesions. It should never be taken alone, but taken with all other methods. The Roentgen ray will check up the clinical findings and will locate and tell you the extent of the lesions. Plates act as records, and they will often give the condition in a more exact and accurate way than any of the other means of diagnosis. The Roentgen ray has its limitations and so have the other methods of physical examination, since men are at the mercy, not only of their lack of knowledge, but of their personal physical conditions as well. The clinician will vary his diagnosis at different times. The Roentgen ray is here used to fill this need. Stereoroentgenograms are records, rather than observations. These records enable us to check up evidence of history, clinical symptoms, signs, palpations, percussion and auscultation. All data must be put together and the diagnosis, treatment and prognosis made therefrom. This is of the utmost importance, and the practitioner must not take short cuts unless he expects to get into serious trouble.

The question is often asked, "Will the Roentgen ray detect tuberculosis as early as the physical examination?" To this I wish to answer that the Roentgen ray will often give us our first definite knowledge of tuberculosis. It will show central and deep lesions where other methods fail. Mediastinal lesions are shown where percussion and auscultation fail to show trouble.

The diagnosis of tuberculosis is not of great value unless we can accompany that with a fairly accurate prognosis. Nothing has ever been of such prognostic value as the Roentgen ray finding, unless it be the physical condition of the patient. Three conditions argue for a bad prognosis — cavity, involvement of the bases, if at all extensive, and laryngeal tuberculosis. Two of these are best determined by the Roentgen ray. A great many clinicians are too prone to make snap-shot diagnoses without going into the case in a systematic way. They are too firmly convinced that the earliest possible means of diagnosis is by reading the physical signs. The ear is trusted more than anything else. If râles are heard in the upper portion of the chest they will find a history of temperature and diagnose the case tuberculosis. A good many men do not be-

lieve that the Roentgen ray will show the earliest lesions. This is a mistake, for the Roentgen ray will show lesions when other physical signs fail, and will show an advanced stage where the physical signs point to an early one. When the clinician finds râles more extensive than the plates show he must consider bronchitis or edema, not tuberculosis. There is no doubt in the minds of the experienced roentgenologist that stereoscopic chest plates well taken can show tuberculous pathology both before and after the clinician fails to secure a sign. There is one point I must not omit, and that is the interpretation of these plates. They take an experienced eye to read them.

A case was sent in for examination of the stomach. The surgeon had advised an operation for gastric ulcer. Patient had spit blood, had pain in abdomen and had all the other clinical evidences of some years' standing. The stomach was found to be normal on the screen and plates. Stereoscopic roentgenograms of the chest revealed the trouble to be in the lungs. Both apices were densely infiltrated, beyond question the result of an old lesion. There were other areas through the lungs of slighter density which probably was an active process. The clinician's report stated that there was slight thickening of the left pleura, but no evidence of pulmonary involvement.

Thus we run into these cases and why? Because we often make hurried diagnoses without giving the patient the benefit of a thorough examination. The expense is often given as an excuse for not using the Roentgen ray, but can we not all see that blunders of this kind make the cost much greater before we finally arrive at a proper diagnosis.

The successful surgeon of today who handles fractures is the man that will not take the case without an Roentgen-ray examination of the fracture. The same is true of any examination. I mean by this that one should use every means he has in making a complete examination. When the methods have all been tried it is then up to the internists, or the head diagnostician, to make his diagnosis from the data which he has received.

With our modern methods of diagnosis, the Roentgen ray as one of them, we should be able to diagnose our cases early. If we get the patients when the lesions are slight and an early diagnosis is made, then we have accomplished the all important thing in arresting pulmonary tuberculosis. It is only a matter of the clinician training the people to these modern methods that the mortality of this terrible plague may cease.

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EDITORIALS

HUMAN DISEASE CARRIERS

In more than one way man is his own worst enemy. He is the source from which originates many of the means of disabling or destroying his fellowmen. How this truth applies with reference to disease we see illustrated day after day.

Within the past few years a very grave problem has been forced upon us, the problem of disease carriers. They apparently are healthy individuals who excrete, constantly or intermittently, bacteria which may be transmitted to others and incite infection in them. Because of their apparent good health, these carriers are permitted to come into intimate contact with their fellowmen. They do not know, of course, that by this contact they may spread disease around with them wherever they go. The community takes it for granted that anyone who shows no signs or symptoms of illness is free from disease and is entitled to every human right and privilege. It is only after the damage has been done, after an epidemic may have been started by such a carrier, that he or she is isolated and restricted in so far as it is necessary to protect the public health.

Already quite a good deal is known about this method of transmitting disease, but we have only just begun to see the light in dealing with this problem. It is known definitely that typhoid fever, diphtheria and pneumonia may, and not infrequently are, transmitted by human carriers. It is believed that epidemic meningitis, poliomyelitis and streptococcic sore throat also are conveyed in this manner. It is very likely, furthermore, that many other types of infection are kept going in the same way. It is quite probable, for instance, that in the regions where the dysenteric infections prevail, the disease may be transmitted by human carriers. It is quite probable, also, that some of the exanthemata are conveyed by human carriers of the virus, whatever its nature may be.

The transmission of infection by persons af-

ected with an infectious or contagious disease is an entirely different matter from the transmission of infection by a so-called carrier. Those who are suffering from the effects of infection of any kind are — or ought to be — cautioned as to the danger of their spreading the infection around the community, and the proper measures for safeguarding the public health must be observed by all concerned. The victim of disease is invariably just as willing to protect the public health as the public is glad to be protected by keeping away from known danger of infection. But in the case of a carrier, both the victim and the public are ignorant of the true situation. The danger is not known, or is not recognized until it has led to results that may have been more or less disastrous.

In one respect, human carriers are like persons affected with a contagious or an infectious disease, i. e., they are all a real menace to their community in so far as prevention of disease is concerned. Now, if we believe that the number of carriers of disease of one kind or another is, without doubt, much greater than we had thought, we realize that perhaps here is the most important problem we have to deal with in our efforts to control the infectious diseases. We must bear in mind that even after the patient successfully recovers from his disease he may be just as much a real menace as he was during his acute illness. He may be cured symptomatically, but not bacteriologically. The latter probably will be of little or no importance to him individually, but it will be of the greatest importance to his fellowmen.

Here, then, is a new duty which we cannot neglect. In every case of this kind the physician should determine to the best of his ability whether his patient is clean and free of bacteria before he is told definitely that he is cured. The physician who neglects to take this precaution is guilty of having failed to perform his full duty.

WHY EFFORTS TO LOWER INDIANA MEDICAL STANDARDS SHOULD BE DEFEATED

(The following information is presented in view of the fact that the chiropractors will seek, at the coming session of the legislature, a separate examination board for members of their cult.)

1. The same preliminary qualification should be required of all persons who would practice the healing art regardless of their individual medical philosophy.

The present requirement of preliminary education is four years' high school and two years' college work. The chiropractors and other drugless healing cults would lower this requirement. For twenty years Indiana has increased its requirements until the above qualifications have been fixed. All of the European countries and seventeen states of this nation require the above standard, while all the other states require a high school education and one year college work, and it is highly undesirable that Indiana drop below this class. The practice of medicine is a most important profession, with far-reaching results, and should not be engaged in by persons not properly equipped.

2. Regardless of what kind of treatment of disease is applied, all practitioners should have a standard general professional education. Anatomy, physiology, bacteriology, toxicology, diagnosis, surgery, obstetrics, dermatology and hygiene should be understood thoroughly by everyone practicing the healing art, regardless of any special treatment which he would administer. The chiropractors claim that a thorough understanding of these is unnecessary; we take the position that human life is so sacred and public health welfare so vital to society that a thorough knowledge of these is absolutely indispensable. Therefore, the present requirements should not be lowered.

3. The universally accepted standard of medical education (both in Europe and America) requires not less than 4,100 hours devoted to the study of medicine in four separate years of nine months each.

PRESENT STANDARD REQUIREMENTS

(1) Anatomy	700 hours
(2) Physiology, organic and physiological chemistry. 530	"
(3) Pathology and bacteriology	500 "
(4) Pharmacology, toxicology and therapeutics.....	240 "
(5) Diagnosis and dispensary and hospital study.....	890 "
(6) Surgery	650 "
(7) Obstetrics and gynecology	240 "
(8) Eye, ear, nose and throat.	140 "
(9) Dermatology and syphilis.	90 "
(10) Hygiene, medical jurisprudence	120 "

4,100 hours

The study of anatomy, physiology and chemistry, pathology, toxicology, diagnosis, surgery,

obstetrics and gynecology, eye, ear, nose and throat, dermatology and syphilis, hygiene and medical jurisprudence, is the same for all sects, no matter what therapeutic measures are to be adopted. Consequently, the examination in these subjects conducted by the State Board of Medical Registration and Examination, is the same for all applicants for a license to practice medicine.

4. The chiropractors and other cults claim that much of the present required medical course is unnecessary and superfluous for their practice; we hold that all the subjects taught, as indicated above, are necessary. There can be no just demand for exemptions in any of the required studies, even by those who practice drugless healing, with possibly the exception of materia medica (the study of drugs) and therapeutics (the application of drugs and the treatment of disease).

5. The chiropractors ask a separate board to examine their practitioners. We submit that no special privileges should be granted any cult, as this would establish a precedent which would mean that for every cult a separate board must be established which could only result in chaos in medical legislation. This demand for a special board is especially obnoxious in view of the fact that it would not require a thorough general training as a pre-requisite as now required of all practitioners. It would give special privileges to the chiropractors not granted to others and would be objectionable class legislation.

6. Since the present law was passed twenty years ago, it has been amended two or three times, each change strengthening the requirements. The proposed chiropractic bill would lower the requirements and reduce the standard. A four years' course of study of the human system is necessary, and in view of the fact that any action lowering this standard would be injurious to the individual and to the state, the present legislature should not assume the responsibility for lowering it, but, rather, should uphold the legislation of the last twenty years and do all within its power to protect the individual and society by requiring high standards for the practice of the healing art.

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WAKE UP, COUNTY SECRETARIES

The secretaries of twenty-two county medical societies, members of the State Medical Association, have absolutely ignored every communication sent out from the office of the executive secretary. These letters have been of vital importance concerning very largely the interests of the profession before the legislature. Every effort to get in touch with these secretaries has been ignored and the result is that this negligence has very seriously handicapped the effectiveness of this department. In no instances were the letters returned to this office, which would lead us to the conclusion that they were duly received by the secretaries. While your executive secretary is not inclined to regard seriously the matter of discourtesy in refusing to reply to his letters, he does ask that for the welfare of the Association, secretaries who have not yet been in communication with him make immediate explanation.

We are sending at this time another letter to the derelict secretaries. We will allow ten days for a reply to this letter after which we are suggesting to the editor of *THE JOURNAL* that in the next issue he publish in black face type the name of every county secretary who has failed to reply to communications from this office. It is only the welfare of our Association and the profession that prompts us to adopt this course.

FREDERICK E. SCHORTEMEIER,
Executive Secretary.

308 Hume-Mansur Building,
Indianapolis, Ind.

THE URGENT NEEDS OF OUR
MEDICAL SCHOOL

On December 7 our medical school building was practically destroyed by fire, and it is very important that the present General Assembly appropriate funds for a new one. The burned building was an old one, not planned for modern medical instruction, and badly situated since over a mile from our two teaching hospitals. It would be a great mistake to try to repair this old building or to rebuild at its location. We should have a modern medical school building on the ground owned by the state on which the Robert W. Long Hospital stands and within two blocks of the Indianapolis City Hospital.

The large sums of money that are now being spent on medical school buildings and equipment in Minnesota, Chicago, Champaign, St. Louis, Louisville, Cincinnati, and which it is proposed to spend in Columbus, Ohio, and in Cleveland,

show how important the citizens of these states consider this matter of providing adequately for their state schools. You surely wish Indiana to be as well equipped as these, several of which have a lower standing than our school. Again, as a result of the raised standards of medical education and of the limitation of the number of students in each class in order that personal instruction may be given, these schools are graduating scarcely enough medical students to supply the demands in their own states. If, therefore, Indiana wishes to keep up the high standards of which she may well be proud, she must continue to educate her own doctors and to give them better and better courses.

It is indeed an emergency problem which confronts us. We are now holding medical classes in the Shortridge High School building, at the Indiana Dental College and in the basement of the Indianapolis City Hospital, as well as on the first floor of the original building and in the wards of the two hospitals. We must make plans at once for new and adequate, up-to-date accommodations, thoroughly adapted for the medical instruction of undergraduate medical students, and a center for the physicians of Indiana where each may find just the post-graduate work he may desire.

The property now used by the school for teaching purposes consists of: The medical school building and the land on which it stands, property worth at least \$125,000, a gift to the state by the faculty of the Indiana Medical College when they united with the Indiana University School of Medicine with the distinct understanding that a first-class medical school was to be conducted in this state; the Robert W. Long Hospital, a building presented fully equipped to the state by Dr. and Mrs. Robert W. Long, and costing over \$250,000; and the Indianapolis City Hospital, in the wards of which we are allowed to teach through the kind cooperation of the Indianapolis Department of Public Health and Charities. The only property purchased by the state for the use of the medical school is the land on which the Robert W. Long Hospital stands. This cost about \$50,000. It is on this plat of ground—a little over sixteen acres in extent—that we feel that the medical school building should be situated.

Our sophomore, junior and senior classes in the medical school in Indianapolis have been ranging from 30 to 40 students, but now we have in the freshman class at the university at Bloomington 65; in the premedical sophomore class 94, and in the premedical freshman class 104. Where will these young men study medicine? Since the reputation of the school has

been so high, a large number have come to Indianapolis, even though they recognized that our physical equipment was the worst of all the surrounding schools. Now these young men, all of them from Indiana, have a perfect right to expect that the old building will be replaced by one that is thoroughly suitable for our purposes. Each year the students have expected that a new building would be built. If disappointed now they would have good reason to believe that the state is not behind its medical school. This is the only medical school in Indiana, and it is the State Medical School, for Indiana has taken over medical education as a state function and should therefore support adequately the one medical school for which she as a state is responsible. Even though handicapped by inadequate buildings and equipment the medical school has attained a reputation for an exceptionally high grade of work, and the people of Indiana should be proud of the record established and maintained. The medical school long has needed and deserved more assistance from the state than it has received, and it now needs that assistance more than ever. Let the General Assembly appropriate the necessary funds to care for the medical school handsomely and thus maintain the high standing of Indiana's educational institutions.

CHARLES P. EMERSON, Dean.

(Indiana doctors should have more than a passing interest in this movement. Get behind it by writing your state senators and representatives to the effect that you expect them to vote for a substantial appropriation for the medical department of the university. Indiana has a medical school that ranks with the best. It deserves more support from the Assembly than it has had, and now is the time to give it a boost that will put it in a position to bring even more credit to the state.—EDITOR.)

NOTICE TO NEW COUNTY SECRETARIES

There have been several new secretaries elected for 1917, and a word of explanation is necessary concerning a few points that might not be understood. It will be your duty to see every member that has not paid for 1917 prior to January 31, as on February 1 I notify all delinquents in every county that they are not in good standing. If they have not had sufficient invitation to pay, they are incensed at this notice.

You are not allowed to accept any dues for 1916 after Jan. 1, 1917, so do not let the former members think they can pay up for time that has elapsed.

CHARLES N. COMBS, Secy.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE new executive secretary is very busily engaged in looking after his duties in connection with legislative matters of vital importance to the medical profession. Members of the Association are requested to direct all inquiries concerning legislation to him, addressing him at 308 Hume-Mansur Building, Indianapolis, Ind.

WE desire to call attention to and correct an error which appeared in the December number of THE JOURNAL in connection with the signatures to the report of the committee appointed to select an executive secretary for the Association. The third name of the committee as given is George McCollough, whereas it should have been George T. MacCoy of Columbus.

WITH this issue THE JOURNAL carries an advertisement that probably will be of interest to physicians, and especially those who drive much. We refer to the detachable auto top, which, it seems to us, fills a long felt want for doctors. There is no reason why doctors should brave the inclement weather of the winter and not be comfortable, and this new device should receive some consideration.

ONE of the readers of THE JOURNAL has sent us a letter received from one of his patrons. The letter is self-explanatory, and is as follows:

GREENSBURG, IND., Jan. 2, 1917.

Dear Doctor: Enclosed find a check for \$33.50 in full of my account. It always is a pleasure to me to pay when I feel that I have full value received.

When I see those notices in the newspapers, saying "We, the family—mother, Bill, and Mary—thank the minister, the choir, and the undertaker," it makes me smile at the poor fools. Why in h— don't they thank the doctor who did all he could to relieve their suffering while they were alive?

Sincerely,

"FEED America first" is a slogan that is gradually winning popularity among the masses in this country. There is no reason why inhabitants of the United States should suffer unduly as a result of the senseless war in Europe. A little self protection for America soon would end the European struggle which is kept up through the ability to purchase food and munitions from this country.

AN interesting feature noted in connection with the recent annual session of the Kentucky Medical Association is the fact that the entire scientific program was filled by Kentucky doctors, no outside talent of any kind whatsoever being imported, and it is reported as being one of the most complete and profitable sessions ever held by the Association. In carrying out this plan regularly, the tendency undoubtedly would be to create more interest and develop the rank and file of the state association into writers and speakers of greater proficiency.

THE Indiana Legislature is in session, and, as usual, a large number of freak bills have been introduced. Considering the limited time during which the legislature is in session, and the number of very necessary measures that must be passed during the session, it is the height of folly for legislators to give even passing notice to the insane and ridiculous demands of would-be statesmen that want to forbid by law the sale of cosmetics, the wearing of corsets and the conducting of ball games or other athletic events on Sunday. Far more important measures necessary for the welfare of the public should take up the time of the legislature.

BY recent action, the Medico-Chirurgical College of Philadelphia has been merged into the Medical School of the University of Pennsylvania; the buildings of the former have become the property of the latter school; and its professors and assistant professors have been taken over as professors of similar rank in the Medical School of the University of Pennsylvania. This merger has brought to the minds of the public a doubt as to the actual accomplishment of the affiliation of the Jefferson Medical College with the University of Pennsylvania, as announced last spring; and it is rumored that as yet these two schools have been unable to effect the combination on a satisfactory basis. If this be true, Philadelphia will receive a setback in her expectation of supremacy in medical education, and will not be able to compete with Chicago, New York and Boston for this honor.

DURING December the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Merck and Company: Formin Tablets, 5 gr. and $7\frac{1}{2}$ gr.; Veronal Tablets, 5 gr. H. K. Mulford Company: Pertussis Bacterin, Mulford. Schering and Glatz: Iocamfen; Iocamfen Ampules. E. R. Squibb and Sons: Urease-Squibb. Non-proprietary articles: Acetylsalicylic Acid; Neutral Solution of Chlorinated Soda.

Now that an epidemic of streptococcus tonsillitis in one of the dormitories of the University of Wisconsin was traced to the bubbling fountains in the building; and further, that a survey of all the fountains of the University showed the presence of streptococci on the metal portions of the fountain in over 50 per cent. of the total number, the theory that the bubbling fountain is the last work in sanitary science has been completely upset. However, it is thought that the difficulty will be satisfactorily corrected if the jet is inclined at an angle, and that an adequate collar guard to prevent possible contact with the orifice will do away with the danger that bacteria will collect in the water.

THE medical profession of the State of Pennsylvania has grasped the idea which we so often have emphasized, that it is the united effort which brings results, and on November 23 representatives of the Homeopathic State Medical Society, of the Eclectic State Medical Association, and of the Medical Society of the State of Pennsylvania, met and considered pending medical legislation. The outcome of the conference was the agreement of the three societies to work together in the interests of the medical profession in the largest general sense; and the work was begun by the framing of certain amendments (pertaining to the medical profession) to the Workmen's Compensation Law, and other medical legislation, to be presented to the next legislature. Never in the history of medicine has there been a greater need for combined effort to uphold the rights of the medical profession, to protect the medical man and the public as well, and to prevent vicious legislation which lowers medical standards and places sick and suffering humanity at the mercy of quacks and incompetents. It is time for the Indiana medical profession to make a united stand, even as the Pennsylvania medical profession has done.

THE pure food and drug commissioner for Indiana is an energetic and enterprising public official. Likewise, he is very competent, but we doubt if medical men will approve of some of his statements relating to public health. For instance, the statement that it is not the quality but the quantity of candy that hurts children, and that cheap candies are not unwholesome, is open to question. It is reasonable to suppose that cheap candies are made from materials of inferior quality, oftentimes adulterated, and made under insanitary and unhygienic conditions. To stamp such articles as being wholesome it seems to us is like denying the value of quality in anything that we put into our systems. Educating the public is all right, but statements emanating from supposedly good authority should be so worded as to avoid being misconstrued by the average person.

THIS is the last month for the payment of dues to the Association, for on and after February 1 those who have not paid their dues are delinquent, and from that time forth forfeit all the advantages and perquisites which go with membership in the Association. The fact that a delinquent is not entitled to medical defense is in itself sufficient to cause every member of the Association to be careful not to become delinquent. There is no excuse for delay in the payment of dues, and we suggest that any member of the Association, who, up to this moment, has not paid his dues ought to make it a point to send a remittance to his secretary immediately. Do it now, and it's done! To postpone it may mean delinquency, and the loss of many hundreds of dollars in medical defense that can and should be saved through membership in good standing in the Association.

THE legal status of the American Medical Association, as pertains to the holding of election of officers outside of the state, was sustained by the circuit court of Cook County in its decision handed down on Dec. 16, 1916, which ruled that corporations not for profit may elect trustees or directors outside of the state. This question has been pending for six years, or since the 1910 annual meeting of the Association held at St. Louis, when it was rumored that an injunction would be served on the members of the House of Delegates to prevent the election of officers, but no definite action was taken until Jan. 5, 1911, when a petition was filed in the circuit court of Cook County against the state's attorney, asking that he be compelled to bring suit against the trustees of the Association. The matter went to the appellate court twice, and

finally to the supreme court of Illinois, which, on Dec. 20, 1915, refused to hear arguments on the merits of the case, and ordered the circuit court to take up the original question, which court, just one year later, has rendered the above decision. Comment from the Chicago disturbers is unnecessary.

ONE of our readers wrote a letter to one of the most prominent advertisers in THE JOURNAL complimenting the firm on the quality of their wares, and assuring them that their patronage of THE JOURNAL was appreciated. In answer thereto, the firm sent the following letter, which was turned over to us with a view to acquainting us with the fact that the members of the Indiana State Medical Association are practicing reciprocity and are letting advertisers know the fact. The letter, without signature, is as follows:

Dear Doctor: We have pleasure in acknowledging receipt of your communication of the 23d, and are pleased to know that you are a believer in reciprocity, especially when it can be backed up with quality.

We trust that your state journal may continue to prove an excellent advertising medium for the products of our house. It is clean, fearless, and well edited, and in our opinion, one of the best state journals published. For these reasons we advertise therein.

With the personal regards of the writer, we are,
Very truly yours,

THE Indianapolis medical building of the University burned to the ground early in December. In one sense the loss was not great, for the building was old, insanitary, and thoroughly inadequate for the present needs of the University. It now becomes necessary for the legislature to make an appropriation for a new building, and it is hoped that the needs of the institution will be met fully so that medical teaching can be carried on in a manner that is in entire keeping with the standing of our University. Indiana should be proud of her educational institutions, for in reality they have accomplished great things with a minimum amount of financial support. Heretofore the Medical Department of the University has not received the financial aid that it deserves. It has, however, in spite of this difficulty, attained a standing among educational institutions that is a credit to the state, but more particularly to the officers of the University. There should, therefore, be no hesitation on the part of the legislature in appropriating liberally for the support of such a school, for it not only means much to the school itself, but should be a monument to the state.

BECAUSE of the present-day scarcity and high price on many of the imported drugs, an unusual number of imitations and adulterations of the same have been discovered on the market. Of the 1,036 cases of fraudulent medicines which terminated in the courts during the year, 198 were brought on account of the false and fraudulent labeling of medicines; and in all but five of these medical cases the courts found for the government. These results are believed to have had a strong deterrent effect on the vendors of nostrums shipped from one state to another. Then, too, the work of controlling the fraudulent labeling of medicines and mineral waters has been greatly strengthened by the establishment of a separate office to deal with these matters, with an officer of the U. S. Public Health Service in charge. Through close cooperation with the foods and drugs officials of many of the states, much fraudulent goods in the hands of local dealers, and beyond the reach of the federal authorities, were brought to the attention of and destroyed by state and municipal officers, and in many instances those responsible for the local traffic were prosecuted.

HEROIN is a drug much used by drug addicts. Some confirmed addicts prefer it to cocain or morphin. Its use has led to great activity in efforts to suppress its sale. Now comes the action of the Committee on Drug Addiction of the Committee on Social Hygiene of the National Committee on Prisons with a resolution declaring that the drug heroin is of no real value in the practice of medicine, that its place may be taken by more efficacious agents that do not menace public welfare, and that the committee recommend federal legislation to prevent the importation, manufacture and sale of heroin in the United States of America. In this matter of legislation to control the sale of habit-forming drugs we would go a step farther and prohibit the sale of habit-forming drugs to anyone but a duly licensed medical practitioner, and we also would make it a punishable offense for any physician to dispense habit-forming drugs. There is absolutely no reason why any patient should have morphin or cocain derivatives for use according to his own will, and so far as any of the habit-forming drugs are concerned, they are not therapeutic agents. Cocain, for instance, is a local anesthetic, first, last and all the time, the effects of which are evanescent, and it should be employed as a local anesthetic only. There is no excuse of any kind whatsoever for the prescribing of cocain, and the physician who gives a patient cocain for any kind of use deserves prosecution.

WE understand that at the present session of the Indiana legislature an effort is to be made by the pharmacists to secure legislation which will prevent dispensing by physicians. In all probability any bill that will be introduced will be so worded as to disarm suspicion, but we caution our legislative committee to analyze most critically any bill that has for its object the regulation of the prescribing or sale of medicines of any description. To prohibit the sale of drugs by general stores, groceries, pedlers and others is quite in keeping with good sense, but to prohibit the dispensing of drugs by physicians, who are the only ones entitled to the privilege of dispensing medicine, would be to enact a piece of vicious legislation that would discriminate in favor of druggists, who, in reality, are the worst offenders. As the *Journal of the Kansas Medical Society* well says:

No doctor cares to send his prescriptions to a pharmacist who himself prescribes for every ailment, from corns to meningitis, frequently using the prescriptions on file in his store for the purpose. No doctor cares to send his prescriptions to a pharmacist who will substitute salt for iodid of potassium. No doctor cares to send his prescription to a pharmacist who refills them perpetually, for the original purchaser and for twenty or thirty others to whom they have been recommended, without regard to the ailment. No doctor who has seen the nausea and disgust of his patient, on trying to swallow some of the muddy looking, ill smelling, vile tasting concoction the druggist has succeeded in making out of his prescription, is likely to regret the advent of the proprietary preparations, among which he may usually find one containing the combination of drugs he wishes to use.

But aside from all this, a law compelling physicians to write prescriptions for everything prescribed for patients would not only abridge the rights of physicians, but would be a positive injustice to patients. What is the country doctor to do, and what is any doctor to do in the night when pharmacists, except in a few of the larger cities of the state, do not keep their places of business open? Think of the inconveniences, the suffering and even the danger entailed in the requirement that anything and everything prescribed for an ill person must be procured of a registered pharmacist! Legislation such as the pharmacists desire would be wholly unwarranted and unjust, and would be discriminating in favor of the pharmacist who is not entitled to a monopoly in the dispensing of drugs.

It is becoming more evident that in the fight against disease attention must be paid to the fact that not a few diseases are carried by domestic pets. Stray cats and dogs may incite

the sympathy and protection of the society for the prevention of cruelty to animals, but from the public health standpoint they should be destroyed. Incidentally, there is no good and sufficient reason why these pests should not be made to serve a useful purpose by having them turned over to recognized experimental stations where they may be used in furthering research work in the interest of human life preservation. There is another pestiferous animal that is a very grave menace to public health, to say nothing of being a great destroyer of property. It is the common rat, which, according to *The Forecast*, annually destroys food alone to the value of one hundred and sixty millions of dollars. The rat not only disseminates bubonic plague, but carries tapeworms, trichinae, flukes, roundworms, and other parasites, besides being suspected as an active agent in communicating leprosy and infantile paralysis. It can gnaw through any common building material except stone, hard brick, cement, glass and iron. It destroys whole fields of grain, climbs trees to steal fruit, eats both fowls and their eggs, and destroys game. It steals costly furs and laces for its nests, when it can get them. Much of our annual loss by fire is due to the rat, and he also starts floods by burrowing in dams and levees. He is a great traveler, and is fond of living on shipboard, though, fortunately, he journeys little by rail. Finally, his fecundity is prodigious, the fond mother presenting him with numerous additions to the family circle, sometimes as frequently as once a month. Rat-proofing old buildings is described by the writer in *The Forecast* as the chief insurance against fire and pestilence. Concrete is the greatest aid in rat-proof construction, and, fortunately, concrete is fairly cheap, and little skill or special knowledge is required to mix and lay it. Next in importance to concrete is wire netting heavy enough to resist the teeth of rats. This also is inexpensive, and by the aid of these two materials old buildings can often be rat-proofed at little cost. In addition to being excluded from buildings, rats must be deprived of food and nesting places outside. Any heap of rubbish will provide a home for a rat, while garbage serves it excellently as food, and stable refuse furnishes it with both bed and board. The sanitary disposal of garbage and manure is as important in the control of the rat as in that of the fly. Wooden sidewalks are not to be tolerated in any town that wants to be free from rodents, as underneath them comfortable homes can be constructed. The only thing to do is to replace them with cement, cinders or gravel.

THE Editor of THE JOURNAL recently has received a letter calling his attention to one of the tragedies of the European war in the premature death, at the age of 45, in London, of Dr. Jules Broeckaert of Ghent, Belgium, one of the most industrious and enthusiastic workers in oto-laryngology. Dr. Broeckaert not only did a good deal of original research work, was prominent as an editor and writer, and had frequently represented Belgium at the international medical congresses, but was fully established as one of the leading laryngologists of Belgium; when, on the invasion of his country, he was compelled to abandon all he possessed, and with his wife and four children arrived in London with thousands of fellow refugees. For a year he worked as physician among his encamped compatriots, then went to Holland to try to find an appropriate opening, was unsuccessful and returned to London where he had to practice among his people as a general practitioner and accoucheur, with little or no financial remuneration for his services. He suffered greatly from overwork, and had declared himself as being so very, very tired only a few days before eternal rest came to him, following a stroke of apoplexy. Ruined, struggling against unsurmountable odds, with the eventual loss of his life due to a war which neither he nor his sought, the story is sad enough, but from reliable sources it is learned that a dearly beloved wife and four children are entirely without means, and need assistance. American physicians are asked to contribute from \$1.00 upward to assist in helping the dependent wife and children, and contributions may be sent to Dr. Christian R. Holmes, Cincinnati, Ohio. We always have believed that there was a day of reckoning, and when the day of reckoning comes for the tragedies of the greatest war the world has ever seen, we hope that someone will pay a heavy penalty for the tragedies in Belgium and for the inhuman practices that still prevail there under the excuse that they are justifiable acts incident to war. Belgium was an innocent bystander, but she has suffered from atrocities of every description in consequence of a war that was senseless in its beginning—except to satisfy the ambitions of a military dynasty—and one that will end without accomplishing anything except the sacrifice of millions of lives and billions of dollars worth of property for those who are engaged in it. The incident to which we have referred is but one of hundreds of thousands of like character that have occurred in Belgium. Is it any wonder that the majority of people in neutral nations hope that Belgium will be avenged?

THE pseudomedical cults lose no opportunity to educate the public concerning their peculiar methods of practice. The Christian Scientists long have had a publication committee; the osteopaths regularly run in the daily press a small department devoted to their theory that all disease can be relieved by "adjustment"; and now the chiropractors are following suit, not only with claims concerning their work, but they are distributing gratuitously, from house to house, a magazine known as *Chiropractic News*. Is it any wonder that the public oftentimes is unable to separate the wheat from the chaff? What the public should know, and what it should have sense enough to demand, is a knowledge of the amount of education these pretenders secure before attempting to relieve suffering mankind. The public should know that all of these short cuts to a privilege to practice medicine means a lessening of competency and efficiency as compared to the methods employed by the regular medical profession. The public ought to know, and we should make it our business to see that it does know, that in requiring our medical students to have from two to four years of college work before they can even begin the study of medicine, and that after that they must have from four to five years, of from nine to ten months each, of hard study, and then pass a stiff examination before being permitted to practice medicine, is wholly in the interest of the public and represents the only way by which an intelligent knowledge of the human body in health as well as disease can be obtained. For a person with perhaps no more than a common school education and who has had a few weeks of indifferent instruction in what is nothing more than massage, to attempt to prove that all disease is due to a misplaced vertebra or a tight or pinched muscle that a little so-called "adjustment" will cure, is ridiculous. If the pretender who makes such statements really had any education and training he would not make such statements, for he would know better, and in fact it is a question if the whole brood of "adjustors" do not inwardly realize that they are pretenders and fakers when they make claims that are directly opposed to established scientific facts. But, as we started out to say, education sometimes comes about through publicity, and what the public needs is a little more education concerning the facts on which scientific medicine and its practice are founded. The Christian Scientists, osteopaths, chiropractors and others of their kind should not be the only ones employing the lay press for educational purposes.

DEATHS

LOREN F. GAGE, M.D., Grandview, aged 61 years, died November 19.

SAMUEL R. FISH, M.D., of Rochester, died December 18, aged 72 years.

EFFA A. NORTON, M.D., former Indianapolis physician, died December 22, at Chicago.

ALEXANDER BAILY, M.D., aged 96 years, died December 24 at the home of a son near Morocco.

JULIA E. ALLEN, aged 61 years, widow of the late Dr. Seth Allen of Shideler, died January 4, at Selma.

HENRY C. MARTIN, M.D., Indianapolis, University Medical School of New York, died December 22; aged 83 years.

NATHAN F. CANADY, M.D., Hagerstown, died January 5, at the home of his son, Dr. C. E. Canady, at Newcastle, aged 71 years.

ELLERY C. WEBSTER, M.D., oldest practitioner of Marion, died December 17 following a stroke of apoplexy. Dr. Webster was 72 years of age.

ALONZO W. VINCENT, M.D., Valparaiso, died November 29, at the home of his daughter, Mrs. Otis B. Nesbit, of Gary; aged 77 years. He practiced medicine for many years at Deepriver and Valparaiso, but has not been actively engaged for the past few years.

JOHN S. SELLERS, M.D., Hartford City, father of Dr. Charles A. Sellers, died January 3, aged 74 years. Dr. Sellers graduated from the Indiana Medical College, Indianapolis, 1878; was formerly a Fellow of the American Medical Association, member of the Blackford County Medical Society and the Indiana State Medical Association.

RICHARD M. THOMAS, M.D., Greensburg, died December 16 at the Good Samaritan Hospital in Cincinnati following an operation for bladder trouble. Dr. Thomas was a native of Decatur County, and practically all of his life was spent in that vicinity. He was a member of the Board of Pension Examiners, a member of the School Board, and vice-president of the Decatur County Medical Society at the time of his death.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

GENERAL

DR. F. E. SEAL of Brookville was married recently to Miss Bertha Ross.

DR. B. S. WHITE of Greensburg has been appointed county physician for Decatur County.

DR. W. J. NORTON of Hope was married, on November 30, to Miss Nellie M. Ross of Petersburg.

DR. C. S. BRYAN of Vincennes has been appointed county physician for Knox County for 1917.

DR. F. J. SPILMAN of Comersville has returned from Chicago where he has been taking special work.

DR. GEORGE G. RICHARDSON of Van Buren spent November in New York City doing post-graduate work.

DR. N. F. CONNOR and Miss Margaret Crawford of Muncie were married December 4, at Covington, Ky.

DR. BURT O. BURRESS of Alfordsville and Miss Ruth Hawkins of Washington were married December 20.

DR. ARTHUR T. KEMPER of Muncie suffered a painful injury on December 12, when his right leg was fractured.

DR. JAMES W. C. SCOTT of Hecla was taken to Johns Hopkins Hospital, Baltimore, early in December for treatment.

DR. N. D. BERRY of Muncie was quite seriously injured in an automobile accident about the middle of December.

THE marriage of Dr. James A. Taylor of Montpelier, to Miss Jessie Craven, was solemnized on December 22.

DR. S. M. VORIS of Columbus, who has been in Duluth, Minnesota, for several months is expected home this month.

DR. EDWIN RINEAR, formerly located at Mt. Vernon, has removed to Bluffton, and will practice medicine in that city.

DR. ALBERT CLARKE SEATON of Indianapolis was married, December 15, to Miss Marguerite Elvin of the same city.

DR. A. A. BOND of Westfield, Indiana, left the first of the year for medical missionary service in British East Africa.

DR. GEORGE E. REYNOLDS of Columbus, has lost practically all vision of the right eye. The cause has not been located.

THE new Bartholomew County Hospital at Columbus will be completed and ready to receive patients by January 15.

DR. A. J. BANKER of Columbus recently attended a meeting of the surgeons of the Big Four Railroad held at Cincinnati.

DR. and MRS. B. M. EDLAVITCH of Fort Wayne are announcing the birth of their second child, Betty Marie, December 11.

DR. E. E. JOHNSTON, formerly of the Methodist Hospital at Indianapolis, has located at Star City for the practice of medicine.

DR. J. E. STULTS of Fort Wayne underwent an operation for appendicitis early in December. He is making an uneventful recovery.

THE family of Dr. A. P. Roope of Columbus is spending the winter in St. Petersburg, Fla. Dr. Roope spent Christmas with them.

THE LAKESIDE HOSPITAL, Kendallville, has installed a new high pressure sterilizer, the gift of Dr. H. A. Duemling of Fort Wayne.

DRS. W. H. and ROSS C. MARTIN of Kokomo are spending the winter on their orange and grape-fruit farm at Winter Haven, Florida.

DR. M. R. POLLON, formerly of Stockwell, has taken over the practice of the late Dr. Armstrong at Thornton, and located at that place.

THE marriage of Dr. Virgil H. Moon of Indianapolis, to Miss Beryl Kelly of Waukegan, Illinois, on December 20, has been announced.

DR. CLAUDE LAMONT WHEELER of New York, editor of the *New York Medical Journal*, died December 30 of bronchopneumonia, aged 53 years.

DR. W. H. BUTLER of Columbus has been having a very severe attack of pleurisy following lagrippe for the past few weeks, but is improving.

DR. HENRY HERR of Washington, who underwent an operation for gall-stones several weeks ago at the Olney Hospital, is much improved.

DR. GEORGE ORF of Indiana Harbor has suffered a severe breakdown from overwork, and has been in a critical condition since Thanksgiving Day.

DR. J. C. HILL, formerly of Bicknell, recently has accepted a position in the Medical Department of the Western Electric Company, and has removed to Chicago.

DR. OSCAR C. BREITENBACH, formerly of Minnesota, has located at Columbus, Indiana, and has limited his practice to diseases of the eye, ear, nose and throat.

IN honor of the 70th birthday anniversary of Dr. C. L. Dreese, the Goshen Medical Society held a banquet on December 22. Dr. W. B. Page acted as toastmaster.

DR. E. O. ASHER of New Augusta, Indiana, was married December 25 to Miss Mabel Newton of San Francisco, California. The wedding was solemnized at Fort Wayne.

DR. O. A. DELONG of Azalia had a very narrow escape recently when his machine was struck by an interurban car. The machine was badly damaged, and Dr. DeLong received slight injuries.

DR. M. A. AUSTIN of Anderson has been named an advisory member of the Board of Standardization on First Aid Treatment under the direction of the United States Department of Labor.

THE Elkhart Academy of Medicine has elected the following officers for the coming year: President, Dr. C. F. Fleming; vice-president, Dr. S. T. Miller; secretary-treasurer, Dr. P. B. Work.

DECATUR COUNTY MEDICAL SOCIETY has elected the following officers for the coming year: President, Dr. I. M. Sanders; vice-president, Dr. R. M. Thomas; secretary-treasurer, Dr. P. C. Bentle.

DR. HENRY STEPHENS of Star City has recently been united in marriage to Mrs. Nellie Washburn of Crown Point. Dr. Stephens has sold his practice at Star City, and will locate in Crown Point for practice.

OFFICERS for the coming year for the Wayne County Medical Society are: President, Dr. J. E. King; vice-president, Dr. O. M. Huff; secretary, Dr. A. J. Whallon; treasurer, Dr. J. M. Fouts; censor, Dr. J. N. Study.

EMIL H. BECKMAN, M.D., of Minneapolis, member of the staff of the Mayo Foundation for Medical Education and Research, and of the faculty of the Graduate School of the University of Minnesota, died recently.

FLOYD COUNTY MEDICAL SOCIETY, at a meeting early in December, elected the following officers for 1917: President, Dr. W. L. Starr; vice-president, Dr. Felix W. Hazelwood, and secretary-treasurer, Dr. P. H. Schoen.

DR. J. W. MCKINNEY of Bluffton was operated on December 11, at the Augustana Hospital, Chicago, for gall-stones. This is the second operation for Dr. McKinney, he being operated on for appendicitis in 1909.

AT the December meeting of the Huntington County Medical Society the following officers were elected for the ensuing year: President, Dr. M. H. Krebs; vice-president, Dr. Sylvanus Koontz; secretary-treasurer, Dr. F. B. Morgan.

DR. ALBERT E. BULSON, JR., of Fort Wayne announces the removal of his offices from 219 West Wayne Street to 406 West Berry Street (corner of West Berry and Ewing Streets). This change includes the offices of THE JOURNAL.

DR. ALFRED HENRY of Indianapolis has been elected president of the new Marion County Tuberculosis Hospital Board. Other officers are Mrs. Florence Holliday, vice-president; Dr. J. A. MacDonald, secretary, and J. W. Lilly, treasurer.

DR. J. J. STANTON of Logansport, formerly in charge of Ambulance Company No. 2 of the Indiana National Guard, has been promoted to captain of the company to succeed Captain Arnett, who has returned home with Ambulance Company No. 1.

AT the annual business meeting and banquet of the Knox County Medical Society, held at Vincennes December 12, the following officers were elected for 1917: President, Dr. S. A. Prather; vice-president, Dr. C. L. Boyd, and secretary-treasurer, Dr. V. A. Funk.

THE annual stag banquet of the Fort Wayne Medical Society was held December 11 at the Anthony Hotel, with fifty members present. Dr. Garrette Van Sweringen, retiring president, presided, and talks were made by Dr. C. G. Beall, the new president, and Dr. H. O. Brugge-man.

FOUNTAIN-WARREN MEDICAL SOCIETY met in regular monthly session at Attica, December 14. Dr. Wm. Shimer of Indianapolis was the principal speaker. Election of officers for the coming year was as follows: President, Dr. J. L. Johnson; vice-president, Dr. Kirk; secretary, Dr. Pugh.

AT a recent meeting of the Fort Wayne Medical Society the following officers were elected for the following year: President, Charles G. Beall; Vice-President, Allen Hamilton; Secretary, Miles F. Porter, Jr. (reelected); Treasurer, E. E. Morgan; Delegate to State Association, C. R. Dancer; Alternate, Dean Metcalf.

BEGINNING with the January issue, the *Providence* (R. I.) *Medical Journal* becomes the official organ of the Rhode Island State Medical Association, and will be known as the *Rhode Island Medical Journal*. It will conform in its policy to the Council on Pharmacy and Chemistry of the A. M. A. Dr. J. F. Hawkins is publisher, and the address of the Journal will be 114 Westminster Street, Providence, R. I.

THE FULTON COUNTY MEDICAL SOCIETY met early in December at the home of the retiring president, Dr. Harley Taylor, and elected officers for the coming year. President, Dr. B. F. Overmyer; vice-president, Dr. Edgar Hoffman; secretary-treasurer, Dr. Arthur Stinson. The time of meeting of the society has been changed from the first Tuesday of the month to the first Friday.

FORTY thousand dollars has been appropriated by the county commissioners for the erection of an addition to the St. Joseph County Tuberculosis Hospital. The present capacity of the hospital is fifty patients, and the new addition will increase the facilities for the caring of one hundred patients.

PORTER COUNTY MEDICAL SOCIETY met at Valparaiso, December 2, and elected the following officers for 1917: President, Dr. R. D. Blount; vice-president, G. H. Stoner; secretary-treasurer, S. J. Young. Following the business session the doctors attended the funeral of Dr. A. W. Vincent, in a body.

THE new officers for 1917 of the Daviess County Medical Society are as follows: President, Dr. T. F. Spink; vice-president, Dr. B. O. Burris; secretary-treasurer, Dr. H. C. Wadsworth; censor, Dr. C. H. Yenne; hospital advisory board, Dr. H. C. Wadsworth; delegate to state meeting, Dr. S. L. McPherson.

THE H. K. Mulford Company of Philadelphia commemorates the twenty-fifth anniversary of the company by the issuance of a special number of the Mulford Digest, which has been gotten up with considerable work and expense. It does honor to the well known firm of H. K. Mulford.

Leslie's Weekly is publishing a series of articles on foot hygiene, in the first of which, "Perils of the Modern Shoe," Kathleen Hills points out the many ill effects of the modern shoe, not only on the foot itself, but upon the general system. This phase of public health should be given more attention by the medical man.

THE American Academy of Ophthalmology and Oto-Laryngology met in annual session at Memphis, Tenn., early in December. The following officers were elected for the ensuing year: President, Dr. W. L. Dayton, Lincoln, Neb.; vice-president, Dr. Edward Stieren, Pittsburg; secretary, Dr. Lee M. Francis, Buffalo; treasurer, Dr. Secord H. Large, Cleveland.

THE Pulaski County Medical Society held a banquet December 19 at Winamac, and was addressed by Dr. George F. Keiper of Lafayette and Dr. G. W. Thompson of Winamac. Following the banquet, officers for the ensuing year were elected as follows: President, Dr. W. H. Thompson of Winamac; secretary-treasurer, Dr. C. E. Linton of Medaryville.

THE medical building of the Indiana University School of Medicine at Indianapolis was damaged by fire on December 7. The fire started in the laboratory in the bacteriological department, and aside from the damage to the building, considerable valuable equipment, just recently purchased by the University, was destroyed. The loss is estimated at \$25,000. Classes and laboratory work are being continued in lecture rooms at the Indiana Dental College, the Shortridge High School building, and the City Hospital. Just what permanent arrangements will be made has not been decided.

THE Indiana State Board of Health has gotten out statistics showing the average duration of life in Indiana since 1900 as follows: Average age at death in 1900, 36.3 years; 1901, 37.8; 1902, 37.4; 1903, 39.1; 1904, 38.8; 1905, 39.7; 1906, 40.3; 1907, 42.1; 1908, 42.4; 1909, 41.9; 1910, 41.7; 1911, 43.5; 1912, 44.2; 1913, 43.4; 1914, 44.3; 1915, 45.7. In 1896 the death rate per 1,000 was 16.4, and in 1915, 12.9. The increase in duration of life in fifteen years in Indiana was 12.4, equaling an increase of 34 per cent.; and the decrease in death rate in nineteen years in Indiana was 3.5 per 1,000, equaling a decrease of 21.3 per cent. The board certainly deserves a good share of the credit for this improvement.

DR. WENDELL REBER of Philadelphia died December 30 from pneumonia, contracted while attending the annual meeting of the American Academy of Ophthalmology and Oto-Laryngology held at Memphis. Dr. Reber, distinguished ophthalmologist, was a graduate of the medical department of Washington University and of Jefferson Medical College, and has practiced his specialty in Philadelphia ever since his graduation (twenty years). He was professor of ophthalmology in Temple University Medical School, and also the Philadelphia Polyclinic Post-Graduate School. He was the American representative on the council of the Ophthalmological Congress at Oxford, England; ex-president of the Philadelphia Clinical Association; a member of the Philadelphia Medical Club, the American Medical Association and the American College of Surgeons.

IN November, at the suggestion of the Committee appointed by Governor Ralston for the study of mental defectiveness in Indiana, a meeting of the people interested in mental hygiene was held in Indianapolis. At that meeting was organized the Indiana Society of

Mental Hygiene. The purpose of this society is to promote mental health in every way possible. In pursuance of this policy, the directors of this society will be very glad to furnish speakers on the subject of mental hygiene to the county, district and state medical meetings. If any medical society in Indiana would like to have a talk on this subject, and will communicate with Prof. E. H. Lindley, Indiana University, Bloomington, Indiana, the president of the society, or with Mr. Amos W. Butler, chairman of the Executive Committee of the society, such speakers can probably be furnished.

ON December 10, David Byers, of Fort Branch, Gibson County, Indiana, presented himself at the Long Hospital, Indianapolis, for treatment, and upon examination the intern at the hospital diagnosed his disease as leprosy, which diagnosis was confirmed by other medical men and the State Board of Health. Mr. Byers is 69 years of age, has traveled all over the earth, his last experiences away from home being at Panama, but for several years has lived with his wife and daughter at Fort Branch. It is not known where he became inoculated with the disease, but it is in the advanced stages and the victim probably will not live long. He was conveyed from the Long Hospital, via automobile, to his home, and there, with his family, was placed under strict quarantine. He is the third leper which has appeared in Indiana in the last thirty years.

The following poster has been gotten out by the Committee on Pollution and Sewerage of the Merchants' Association of New York:

Kill the winter flies! Now is the time to begin next summer's campaign! Most of last season's flies, having completed their life cycle, are dead; but those hatched late are now laying eggs in favorable places for incubation in the early spring. Some of these eggs will hatch out during the winter in an even temperature. These winter flies will become the progenitors of next summer's countless billions!

The continuous warm weather of the fall has brought to life many generations that would have perished by the frost. This multiplied army has now invaded houses to seek shelter for the winter in some secluded nook or corner, to emerge in the early spring and start colonies of innumerable numbers.

Don't trust the cold to kill them. Don't assume that they are dead when you find them lying on floors or window sills in unused rooms. They are "playing possum" and will revive when the temperature rises.

Clean up the house and give special attention to every out-of-the-way place where flies may lurk. Make sure that there is nothing left which may harbor their eggs.

As a carrier of disease germs the fly has no superior. When it hibernates it carries on and in its body the germs with which it has come in "contact," and which remain until the breeding activities begin. These are transmitted to the young fly in the larva and pupa stages.

Intestinal germs, such as typhoid and dysentery, are carried and spread by the fly. There is strong scientific authority to the effect that anthrax and infantile paralysis (germs or virus) are also carried and spread by flies. By destroying *NOW* the progenitors of next summer's disease-germ-carrying swarms, a repetition of this past summer's troubles may in a great measure be prevented.

One fly that survives the winter will become the parent of hundreds of millions next summer!

SOCIETY PROCEEDINGS

INDIANAPOLIS MEDICAL SOCIETY

Meeting of November 7

Meeting was called to order by President Graham. Minutes of previous meeting were read and approved. Applications of Drs. Robert M. Moore and J. Kent Worthington were read for the second time and referred to the Judicial Council. A communication from the Vanderburgh County Medical Society was read, which included a resolution favoring an amendment to the present Workmen's Compensation Law to the effect that the employee be allowed the privilege of choosing his own surgeon or physician instead of being compelled to take the attendant designated by the employer. Dr. W. B. Kitchen moved that the Indianapolis Medical Society concur entirely in the resolution favoring the above mentioned amendment. Motion was seconded. Dr. E. B. Mumford advised careful consideration of the matter before taking any action. Dr. J. A. Taylor moved to substitute a motion for that of Dr. Kitchen's to the effect that this matter be referred to the Committee on Legislation. Seconded by Dr. Hadley. Motion carried.

SYMPOSIUM ON INFANTILE PARALYSIS

Paper, "Etiology and Pathology," Dr. F. C. Potter.

Abstract.—Acute poliomyelitis, anterior poliomyelitis, infantile paralysis, or Heine Medin's Disease, is an acute infectious communicable disease, characterized by brief prodromal symptoms, sudden complete paralysis of one or more groups of muscles, followed by more or less atrophy of the paralyzed muscles, and subsequently an imperfect growth of the limb. An anaerobic organism isolated by Flexner and Noguchi early in 1913 and fulfilling all of Koch's postulates, was described as minute, bluish or violet globoid bodies, arranged in pairs, short chains, or small masses. In 1916 Rosenow and others isolated

an aerobic organism which they believe is doubtless the Flexner-Noguchi organism under different cultural conditions. During the past summer, New York City and state, New Jersey, and Pennsylvania reported over seventeen thousand cases. The disease is transmitted by active or passive carriers, and usually gains entrance to the human system by the mucous membrane of the upper respiratory tract, spreading along the lymphatics to the subarachnoid space of the brain and cord. Ninety-six to 97 per cent. of cases occur in children under 10 years of age. At necropsy the cerebrospinal fluid is increased in amount; the vessels of the cord and brain deeply congested; the tissue on sections appears edematous and often contains tiny hemorrhages. Microscopically, the characteristic picture is a perivascular and interstitial infiltration with lymphocytes and a few leukocytes, and more or less destruction of the anterior horn nerve cells. The infiltrative process usually involves the spinal root ganglia and often the brain tissue.

Paper, "Symptomatology, Diagnosis and Medical Treatment," Dr. O. N. Torian.

Abstract.—The paper considers the preliminary symptoms as due to more or less of a meningitis, the characteristic features of which are sudden onset with fever, gastro-enteric disturbances, headache, listlessness followed often by apathy, pains in the neck, back and limbs, muscular twitching, exaggeration or abolition of tendon reflexes which may go on to the definite symptoms of a mild meningitis. The types are the spinal, bulbar, cerebral and abortive or non-paralytic type. The paper describes the different types, reporting two cases and then describes the course of the disease, diagnosis, prognosis and treatment. Under diagnosis it lays stress on the value of lumbar puncture and under treatment attention is called to the prophylaxis and the diagnosis and care of the abortive type and mentions the various forms of treatment that have been advocated recently in the acute stages and the care of the later stages.

Paper, "Treatment of Later Stages," Dr. E. B. Mumford.

Abstract.—Three phases of treatment, First acute, in which rest is the essential element. Second, convalescent, in which plan of treatment is the preservation of muscle bearing and the prevention of contractures by the use of splints and braces and the systemic use of muscle training. Electricity is of doubtful value. Massage, heat and general hygienic care is very important. Third, the residual or permanent stage, in which the treatment is directed toward the correction of deformities, by operation or braces in order to give the greatest amount of stability, by weight bearing associated with as much motion as is consistent with this stability. The operations to be well planned not only for the immediate affect, but for the late results. With this in mind two or three operations at long intervals may be better than one operation which tries to correct everything at once.

DISCUSSION

DR. G. B. JACKSON: One epidemic of this disease in adults reported with a mortality more than double. The bacteriologic work is a most fascinating study and a great amount of work has been done along this line without definite conclusions as to the etiology. The pathology and treatment have changed very little. The care is much the same as in typhoid on account of the involvement of the gastro-intestinal

tract. Only one case in five shows symptoms. Other children in families are carriers. Obscure carriers are of vital importance. Incidence of the disease follows travel. The epidemiology is to be emphasized.

DR. J. H. TAYLOR: The cerebral form comes with sudden onset, no temperature, incomplete paralysis, rigidity of neck muscles, early deformity and clouded mind. The spinal form shows a sudden onset with temperature, total paralysis, flaccid neck muscles, late deformity and clear mind. The peripheral form comes on gradually and shows a complete paralysis, the muscles being the affected parts. These points are to be borne in mind in differentiating the various types of this disease.

DR. J. N. HURTY gave some statistics dating from July 1, 1916, and including the entire state. These showed a total of 170 cases with fourteen deaths. An increase in the number of cases may be expected next year. This disease is probably directly transmitted from one person to another.

Meeting adjourned. Attendance 61.

Meeting of November 14

The meeting was held at Central Hospital for Insane and was called to order by President Dr. A. B. Graham. Minutes of previous meeting were read and approved. Applications of Drs. R. M. Moore and J. Kent Worthington having been favorably passed on by the Council, they were elected to membership in the society. Dr. Edenharter extended an invitation to the Indianapolis Medical Society to meet at the Central Insane Hospital on Dec. 19, 1916, which date is the twentieth anniversary of the dedication of the Pathological Building. The invitation was unanimously accepted by a rising vote.

PROGRAM

Paper, "Arthropathy—Syphilitic." Pathological and Clinical Demonstrations, Dr. F. C. Potter.

Abstract.—Syphilitic arthropathies are relatively frequent, occurring in 4 to 5 per cent. of tabetic cases. The knee is most frequently affected. Wile and Senear recently reported the occurrence of joint involvement in six out of 165 primary and secondary cases. Syphilitic arthropathies are characterized by swelling without pain or inflammation. The swelling may subside without any residuals, or the articular surfaces become eroded, or present bony outgrowths.

CASE 1 (with pathological specimen).—Male, aged 58 years. Bedridden and presented all the characteristic clinical and laboratory findings of tabes. At necropsy the greatly enlarged right knee joint was opened and the head of the femur found enlarged, covered with small, bony, elevated areas; the head of the tibia and under surface of the patella presented a similar appearance. In the joint cavity were three bony masses, all attached to the femur by tendon-like bands.

CLINICAL CASE 1.—Male, aged 53 years. Married, but never had any children. Had syphilis at 28 years of age; began to develop tabes at 37. Adjudged insane at 40. Had severe gastric crises during the next five or six years. Joint trouble followed slight injury to left leg. Shows all the clinical and laboratory symptoms of tabes. Left knee is very large, appears filled with fluid; cavity contains two cartilaginous or bony masses; grates on being hyperextended. Right elbow joint is similarly involved.

CLINICAL CASE 2.—Male, aged 53 years. Denies luetic infection. Showed first signs of tabes nine years ago. Now shows the clinical picture of late locomotor ataxia, and the laboratory findings of early paresis (tabo-paresis). The ninth and tenth ribs on both sides, but especially the left, show a deformity at their junction with the cartilages. There is no history of an injury.

Paper, "Manic Depressive Insanity," Presentation of Cases, Dr. W. S. Wentzel.

Abstract.—This form of insanity comprises from 12 to 25 per cent. of admissions to insane hospitals. The manic type is divided into hypomania, mania and some class delirious mania as a manic-depressive psychosis. The depressed types are usually considered in two classes, viz.: simple retardation, and the delusional form of depression. These types of insanity as a rule, do not cause any dementia unless attacks occur during development and are long in duration. The manic cases display great psychomotor activity, clouding of consciousness, and disorientation with illusions, hallucinations, and delusions of various types. The delusional form of depression is characterized by depreciatory delusions especially of self accusation and of a hypochondriacal nature with a retardation of the psychomotor functions. The mixed types show various combinations of some of the fundamental symptoms characteristic of the manic and depressive phases. In all these cases the prognosis is good so far as the individual attack is concerned, with the exception of 5 per cent. of the cases, in which the onset passes directly from one attack to another and become chronic in nature. Many of these cases have recurrent attacks. Sixty-five per cent. of these patients have their initial attack before 25 years of age and 10 per cent. after 40 years of age. In general, we may predict frequent recurrences of attacks with lucid intervals where the psychosis manifests itself early and without external cause, while, on the other hand, if the first attack occurs late in life and follows some external cause there will probably be but few attacks and in many cases only the one attack. Treatment is always more satisfactory in some sanitarium or hospital. These people should not marry. For the manic types prolonged hot baths and sedatives if necessary. Restraint to prevent personal injury and injury to others when necessary. The depressed cases usually do the best with the rest treatment, nourishment carefully looked after, precaution to prevent suicide and treating the insomnia by the usual methods. Three cases were presented. The first illustrating the hypomanic phase, the second the acute manic phase, while the last illustrated the delusional form of depression.

Paper, "Presentation of a Case of Pontine Lesion," Dr. E. Murray Auer.

Abstract.—The case of a white, adult male admitted to this institution in 1905, at 40 years of age, in whom the mental symptoms are said to have followed an injury to his head, received by striking on a rock in diving from a pier. On Aug. 16, 1916, without loss of consciousness, he developed a complete paralysis of the right face and a flaccid paralysis of the left side of the body. There was paresis of the right external rectus, sign of Neri, etc., but the pupils were negative in every respect. Over the entire left side of the face and body there was a sensory disturbance, syringomyelic in type, without

involvement of the other forms of superficial and deep sensation. Stereognostic perception was not affected. The deep reflexes of the left side were exaggerated but there was no response to the Babinski or Oppenheim tests. The corneal, umbilical and cremasteric reflexes were not obtained on the left side. The lacrimal reflex was present on both sides. On August 18, there was spasticity throughout the left side of the body and the Babinski and Oppenheim phenomena were obtained. The Wassermann on the blood was negative and 3 plus positive on the spinal fluid. The Noguchi test was positive; there were 84 cells per cubic centimeter and Lange's test read 1-5-5-5-5-3-0-0-0-. The paralysis of the left side subsequently receded in the left foot, ankle, knee and thigh and the fingers, wrist, elbow and shoulder in the order stated. This case illustrates the effect of trauma in precipitating a latent specific condition; that disease of the posterior inferior cerebellar artery is most generally of luetic origin; the occurrence of localized sweating in central lesions and the regression of a hemiplegia from the peripheral rather than the proximal portions of the members involved.

Paper, "Some Factors in the Early Diagnosis of Insanity," Presentation of Cases, Dr. Max A. Bahr.

Abstract.—Before the attempt was made to establish nosologic entities in insanity, the classification was purely one of symptoms. Structural pathology is gradually taking its proper place in relation to the disease-picture and we are fully aware, that, while in many instances the anatomical lesion is directly responsible for the existing psychic disease or symptom, we must not lose sight of the fact that it may be the result of the disorder of function brought about in some other manner, or may be entirely secondary to disease in some remote portion of the body.

CASE 1.—Male, aged 40, admitted June 13, 1916, has been a heavy drinker for five years and has taken an average of one quart of whisky a day. This patient manifested many auditory hallucinations, was suspicious, and had well-established fixed ideas of persecution. Question of simple alcoholic intoxication or one in which a man's mind had actually become deranged in consequence of the excessive use of alcohol. It was further shown in this case that when the misuse of alcohol had led to permanent perversion of the emotional status accompanied by fear, to impairment of memory and judgment, and had resulted in positive delusions of a systematized paranoid trend, we could judge the responsibility or irresponsibility of the patient.

CASE 2.—Female, aged 26, admitted July 6, 1916, who had passed through a state of acute delirium following childbirth, probably from the result of hemorrhage and nephritic complications. During this delirium with numerous hallucinations and clouding of consciousness as manifested by the patient, she could not be considered as insane. However, she could be properly pronounced insane when she became conscious of her relations to her environment; when her delusional ideas bore some relation to actual events, as for instance, that she gave birth to twins when in fact she only had a single birth and when the hallucinations were not such incoherent sensorial mixtures of real and imaginary things, but were based largely on personal experiences.

CASE 3.—Male, aged 31, admitted June 24, 1916, was presented to differentiate early paranoid dementia praecox from a true paranoia. Patient presented auditory hallucinations of religious content, an indifferent and apathetic emotional state, and would do silly and childish things. This, with a frequent outbreak into nonsensical laughter and numerous mannerisms which are evidences of deterioration, and with the early appearance of the hallucinations and frequent emotional anomalies speak for paranoid dementia praecox rather than true paranoia.

CASE 4.—Female, aged 25, admitted Aug. 11, 1916. For eleven months previous patient was only considered nervous, excitable and greatly in need of rest. In reality the patient was in the developmental stage of an early paresis for already at the time of her admission, she presented dilated pupils which would not respond to light and very sluggishly to accommodation. Other neurological manifestations, as tremors, diminished patella reflexes, slight disturbance in coordination, Babinski phenomena were already in evidence. Laboratory examination of the spinal fluid gave a cell count of 112 per cubic centimeter, a very strongly positive Wassermann with an absolute inhibition with 0.1 c.c., strongly positive Noguchi, and a characteristic Lange colloidal gold curve. Blood was strongly positive.

The summary of the presentation is as follows:

1. A mental diagnosis should be made with a view to represent disease entities, rather than pure symptomatic phenomena.
2. The differentiation between sanity, mental disorder and insanity is more or less arbitrary.
3. Alcohol intoxication or drunkenness is to be differentiated from those cases in which distinct structural changes are brought about in the brain in consequence of long continued use of the drug.
4. In post-infection-exhaustion psychoses it is necessary to eliminate the immediate effects of such autotoxic factors as uremia, or the immediate response of septic toxemia of an infection.
5. The early development of hallucinations with early progressive mental deterioration, with greater disturbance of the emotions, and delusions less elaborated and connected, speak for paranoid dementia praecox rather than a true paranoia.
6. In all suspected cases insist on an early laboratory examination to determine a psychosis of an organic nature of unfavorable outcome, from a recoverable, so-called functional disease.

The society extended a vote of thanks to the staff of the Central Hospital for the excellent program.

Meeting adjourned. Attendance 32.

Meeting of November 21

Meeting was called to order by President Dr. A. B. Graham. Minutes of previous meeting were read and approved. Applications of Drs. E. V. Smith, F. M. Dean and H. H. Heinrichs were read for the second time and referred to the Council. The applications of Drs. Charles F. Bayer and Roy B. Storms were read for the first time and ordered posted for thirty days. Dr. Jaeger moved that the question involving an amendment to the Workmen's Compensation Law, which question had been referred to the Committee on Legislation, be brought up for general discussion in open meeting. Motion was sec-

onded. Dr. Heath moved to substitute a motion for that of Dr. Jaeger's to the effect that the Committee on Legislation be instructed to report on this matter at the next meeting. Motion was seconded and passed.

PROGRAM

Paper, "Cataract," Dr. William F. Hughes.

Abstract.—Cataract may be defined as an opacity of the lens, capsule or both. Since the regressive changes in metabolism and senile cataract are closely associated, it is very probable that one or more toxic substances will be demonstrated as the etiological factor in senile cataract. The treatment consists of a medical and surgical stage. In the incipient stage the general health must be kept at the highest possible level for the particular patient. The surgical stage consists of the removal of the lens when the cataract has reached the stage of maturity. The combined operation is usually the one advisable in most cases.

Paper, "Hyperthyroidism and Its Relation to Female Pelvic Disorders," Dr. T. B. Eastman.

In the absence of Dr. Eastman, Dr. H. K. Bonn read his paper.

Abstract.—The subject of the ductless glands represents a broad and important field, the surface of which has been hardly scratched as yet. The old statement "a woman is a woman on account of her ovaries" must be modified to read "a woman is a woman on account of her ovaries, plus certain ductless glands, plus the harmonious interrelationship of these glands." To determine in certain cases where the true etiology lies is always of utmost importance and frequently most difficult. On this factor depends our success or failure in the treatment of certain disorders of the pelvic viscera of the female.

Conclusions: 1. The ovary is a gland of double structure—the corpora lutea and the interstitial cells.

2. There is a close physiological relationship between the ovaries and the thyroid, with the result that

3. In certain circumstances an affection of either one may produce abnormal conditions in the other.

4. Thyroid secretion and ovarian secretion do not supplement each other, they neutralize each other (Goodall and Conn).

5. In our study of disease, particularly of glandular structures, we must not fail to consider the biochemistry, normal and abnormal, involved in a given case.

6. In cases presenting symptoms pointing to both these structures only the most careful study will point the direction of proper surgical attack.

DISCUSSION

DR. F. C. HEATH has been using dionin in treatment. Only treatment of cataract when mature, is operation. Bichlorid solution very useful if prepared twenty-four hours in advance, thus giving a perfect solution. Smith operation rather dangerous. Preliminary iridectomy thought by some to be the more conservative measure. Results seem to be about the same in most cases if both operations are done at the same time. Removal of the cortical remains depends on the ease with which this can be done.

DR. E. E. PADGETT: An abundance of evidence shows the relation between the thyroid and the ovaries. No definite rule may be given which will indicate the relationship in all cases. The effect of

the emotions on the thyroid is an accepted fact. It will no doubt be necessary to consider the other glands of internal secretion in connection with this subject. The part played by the suprarenals is especially important.

DR. A. C. KIMBERLIN: The diagnosis of early hyperthyroidism is very difficult. Spontaneous cures are rather frequent and we overlook the earlier symptoms. Mentioned two cases in particular in which an infection of the thyroid followed (1) pregnancy and (2) a prostate case. Apparently there is some connection between fibroids and the thyroid. Case noted in which was found a rather large fibroid with uterine hemorrhage and an enlarged thyroid with usual thyroid symptoms. Ligation and later removal of most of the thyroid gland caused a subsidence of all symptoms although the fibroid remained. Jewish people are poor subjects for thyroid surgery. Menopause is a contra-indication for surgery of thyroid. Enteroptosis and intestinal stasis are etiological factors, the same as any infection, in starting hyperthyroid conditions.

GENERAL DISCUSSION

DR. W. N. SHARP: Senile cataract is produced principally by intestinal and other toxins. Great amount of experience is needed to do the Smith operation successfully.

DR. D. F. LEE spoke of some cases in which the connection between the thyroid and the sexual glands seemed apparent.

DR. A. S. JAEGER: Sajous claims that the suprarenal secretion is an indispensable adjunct to the other internal secretions. Without the adrenal secretion to activate them, the others would be useless.

Meeting adjourned. Attendance 74.

L. H. MAXWELL, Secretary.

BARTHOLOMEW COUNTY

Bartholomew County Medical Society met in regular session in Dr. A. J. Banker's office December 12, at 8 p. m., and was called to order by the president, Dr. Maris.

A very interesting clinic was held. One baby 12 days old with talipes valgus in one foot, and varius in the other; another case, 3 years of age, with an abnormal distension of the abdomen from birth. Both cases were thoroughly examined and freely discussed by a number of the physicians present.

Dr. W. H. Butler reported a very interesting case of diabetes mellitus, and gave his treatment. Dr. A. J. Banker opened the discussion, and was followed by a number of other physicians. Dr. Oscar C. Breitenbach of Minnesota was admitted to the society by transfer.

The society is in splendid condition, showing an increase of six members during the last year.

The secretary's report for the year was given, and was as follows: Nine regular meetings and two special, with an average attendance of eleven members. The society now has twenty-eight members in good standing.

Officers for 1917 were elected as follows: president, Dr. J. I. Maris; vice president, Dr. E. U. Wood; secretary-treasurer, Dr. James W. Benham; censor for three years, Dr. W. H. Butler.

Adjourned to meet the second Tuesday in January.

JAMES W. BENHAM, Secretary.

CARROLL COUNTY

At the December meeting of the Carroll County Medical Society the following officers were elected for the year 1917: president, Dr. Eva H. Kennedy; vice president, Dr. W. J. Mellinger; secretary-treasurer, Dr. W. R. Quick.

At the January meeting an effort will be put forth to change the by-laws to call five meetings during the year instead of ten.

Adjourned.

W. R. QUICK, Secretary.

ELKHART COUNTY

Meeting called to order by Vice President Wagner in Town Hall, Wakarusa, at 2:45.

Minutes of September meeting read and approved.

Motion made and carried that secretary cast unanimous ballot of the society for Dr. L. H. Simmons, Millersburg. Ballot was so cast.

Report of Annual Meeting Committee.

Report of Dr. G. W. Spohn, delegate to meeting of Indiana State Medical Association at Fort Wayne, Sept. 27-29, 1916.

Motion made and carried that two committees be appointed, one composed of three republicans and the other of three democrats; that it shall be the function of these committees to interview the respective candidates to the State Assembly and ascertain what their attitude shall be, if elected, concerning matters of medical legislation.

Committees appointed by President Eby: Republican—I. J. Becknell, C. W. Frink, W. B. Price. Democrat—G. W. Spohn, I. W. Short, A. C. Yoder.

Motion made and carried that officers of society act as publicity committee to inform members when help is needed in matters of legislation.

Motion made and carried that the society entertain the visiting doctors at the Annual Meeting in December and that expenses be paid out of society's treasury.

Dr. H. K. Lemon presented Roentgen-ray plate for diagnosis of foot condition. Patient has antero-posterior ankle movement.

Dr. C. W. Haywood, Elkhart: Plate shows impacted fracture of os calcis. Has similar plate in his possession.

Dr. C. F. Fleming, Elkhart: Remembers seeing one case of fractured os calcis and this resembles it.

Dr. J. C. Fleming, Elkhart: Treatment—do a tenotomy on tendo Achilles and put up in plaster dressing.

Paper, "Choice of Anesthetic in Poor Surgical Risks," Dr. H. K. Lemon, Goshen. Children have no immunity from the dangers of anesthesia. Anesthesia is possibly more easily induced in old age because there is less muscular vigor and excitability to overcome and less vapor is needed. This advantage is offset by fact that degenerative changes in cardiac, renal and vascular systems are the rule in old age and that the excursion of chest walls is limited. Chloroform preferable in old people for these reasons: Each surgical case must be carefully studied before operation, examination of heart, lungs, urine, blood vessels and for any constitutional disease. Ether holds first rank over chloroform for general purposes. Nitrous oxid safest when properly handled but not practical in general practice. Local anesthesia must be that of choice in worst surgical risks. Diabetes

mellitus, acute hyperthyroidism, profound shock, intestinal perforation in typhoid fever, pulmonary edema, anasarca, any form of nephritis, atheroma, asthma, emphysema, bronchitis, dyspnea, obesity, thoracic fixidity. These latter cases should be given chloroform preceded by atropin sulphate $\frac{1}{100}$ grain, strychnin sulphate $\frac{1}{60}$ grain and small dose of heroin—no morphin. Devotees of high life should be given chloroform. Also alcoholics, morphin and chloral users, even tobacco users. Orthopnea and arteriosclerosis are indications for use of chloroform. Experience and proper technic are first considerations in any case.

Paper, "Anesthesia as a Specialty," Dr. E. M. Hoover, Elkhart. Referred to editor of JOURNAL for publication in toto.

Dr. M. D. Price, Nappanee: Much negligence in giving anesthetics. Anesthetist should have a thorough history and should study patient. A year ago, Dr. Price submitted to an anesthetic and operation himself and he realizes importance of points brought out. Surgeon should not tell anesthetist to crowd anesthetic. Believes patient should be watched carefully by anesthetist, giving it his undivided attention.

Dr. J. A. Snapp, Goshen: Laboratory and clinical findings by surgeon should decide kind of anesthetic and the anesthetist. None but emergency cases should be anesthetized in operating room. Patient should not be restrained until completely under anesthetic.

Dr. S. C. Wagner, Wakarusa: Giving anesthesia is an art and should be classed as a specialty. Medical schools now have chairs in anesthesia. Patient may be brought in with minor injury and still be in shock—anesthetic should be carefully selected.

Dr. H. J. Defrees, Nappanee: Ether is chief general anesthetic on account of nontoxic effect on heart, liver and kidneys. Small dose of morphin and atropin should be given beforehand.

Dr. E. D. Stuckman, New Paris: Anesthetist should study suggestive therapy and hypnotism.

Dr. G. W. Spohn, Elkhart: Morphin seems to steady action of heart. All cases should be carefully investigated and prepared. In large cities experts are giving the anesthetics. Suggestive therapy should be used. Intractable children that scream and cry out are put to sleep with one-third the amount of ether that a child takes who goes quietly to sleep. Surgeon works best when he has confidence in doctor giving anesthetic. Indiscriminate choice of anesthetist is wrong. Anesthetist should stay with patient till he is awake.

Dr. C. W. Haywood, Elkhart: Recalled struggling of patient on operating table while being anesthetized. Surroundings should be quiet and favorable to sleep. Repartee between doctors and between doctors and nurses should be prohibited. Patients in Mayo clinic are given suggestive treatment with quiet surroundings. Use of H. M. C. waning. Small dose of morphin and atropin one to one-half hour before operation good practice.

Rules: (1) Drop ether best general anesthetic. (2) Intratracheal in mouth and jaw cases. (3) Gas in short anesthetic, especially in kidney insufficiency.

Dr. J. A. Work, Sr., Elkhart: "Safety first" is very well taken as slogan in anesthesia work. Used to find patients with cold hands and feet and much frightened. Found by experience drop method given

slowly to be correct method. Get patient's attention away from the anesthetic. A mistake to hurry. Rule was not to push anesthetic as long as extremities were cold. Dr. Work never lost a patient and has in forty-seven years given chloroform thousands of times. Cited case in which he gave ether—amputation of leg for gangrene. Operation was finished when heart began to fail. It responded to stimulants and patient recovered.

Dr. I. J. Becknell, Goshen: Has preferred chloroform for thirty years. In past five years has given ether account of general opinion. Preparation of patient very important. Morphin and atropin good preliminary treatment. Very important to have patient quiet. At Crile's clinic, while patient is being anesthetized, no conversation is allowed.

Dr. M. K. Krieder, Goshen: In giving chloroform allow patient plenty of air. Amyl nitrite may be mixed with chloroform. Stretch rectum if respiration fails.

Dr. James Mathews, New Paris: Gave chloroform for Dr. E. A. McGraw, Detroit. Takes plenty of time, plenty of oxygen and air—room warm. Has spent as long as one hour to get patient under—talks to patient to inspire confidence—has never had a death from chloroform, either directly or indirectly—has dilated sphincter muscle to get patient to take long deep inspiration—prefers chloroform because of his own favorable experience with it.

Dr. F. M. Freeman, Goshen: Most Eastern clinics recommend closed method in giving ether. Western clinics the open drop method. Morphin and atropin in small doses sufficient as preliminary. H. M. C. objectionable. In two thousand anesthetics most danger attended those given in Basedow's disease. Has seen two cases die when head was lowered after reversed Trendelenburg. These patients die of acute dilatation of the heart.

Dr. L. A. Elliott, Elkhart: Does not use H. M. C. Few coverings on and around face. "Ether eyes" are gotten by anesthetists trying out corneal reflex.

Dr. P. B. Work, Elkhart: Impossible to estimate damage done vital organs during anesthesia even though large statistics with no fatal cases are given. Crile has brought this out. Premedication, quiet surroundings, etc., will decrease number of cells destroyed, will add to length of patient's life. Ultimate results must be considered.

Dr. J. C. Fleming, Elkhart: How much does commercialism stand in way of efficient anesthesia? Great trouble with anesthetics in the past has been that patients were not studied enough. Certain big men in the profession promulgate ideas of safety of certain anesthetics. Man who gives ether promiscuously will have mortality of 2 or 3 per cent. higher than one who individualizes in selecting anesthetic, goiter cases for example.

Nitrous oxid does not relax sufficiently. Supplement with local anesthetic or follow with ether. Ether not safe for the aged and prostates.

Dr. C. F. Fleming, Elkhart: The specialty of anesthesia should be elevated to a higher plane.

Dr. B. F. Kuhn, Elkhart: The present is a period of refinement in anesthesia. Patients after operation have discussed their terrible experiences during induction of and following anesthesia. If patient struggles remove mask until he quiets down. Alcoholics

especially hard to anesthetize. Morphin and scopolamin should be abandoned. In one week saw two cases of pneumonia following ether. Has seen two cases revived after dilating sphincters failed—in fact sphincters were already dilated when dilatation of them was attempted. Chloroform indicated in old people. For two years has administered veronal, 5 grains the night before operation—morphin puts patient in delirious state if given night before.

Dr. S. T. Miller, Elkhart: Anesthetic mortality, one in two thousand when he attended medical school. Asks Dr. Lemon why morphin should not be used. Absence of fear a big factor in patient's recovery. Pneumococcus is found in normal mouth, secretions are inhaled during anesthetic and pneumonia follows. As long as ears are pink and patient breathes regularly condition is all right. With chloroform give plenty of air. Dr. Miller was anesthetized with chloroform twelve years ago and was terribly nauseated following.

Dr. H. K. Lemon, closing: Nausea has been more pronounced and prolonged when morphin is given prior to anesthetic. Gives atropin and heroin in place of morphin. Cited case who took four ounces of whisky before dental work was done under anesthesia and died in chair.

Dr. E. M. Hoover, closing: Alcoholics should be given whisky—hypnotics the evening before operation highly recommended. Quieting effect on patient to have anesthetist visit him and become acquainted night before operation. Getting confidence of patient main thing in preparation. Assured a patient that she would not strangle and choke. Effect was marvelous. Not once did she choke and was very grateful for the reassurance. In applying psychotherapy, patient must be carefully selected. Anesthetists should be kind to patient. A mistake to approach patient with air of mystery—should be on agreeable terms with patient. Bad practice to tell patient to breathe in—induces hypercapnea. Choice of anesthetist is of greater importance than choice of anesthetic. Must know dangers of chloroform. One departs from open method when using towels around mask.

Adjourned.

Ladies accompanying members were very pleasantly entertained during the afternoon by Mrs. S. C. Wagner assisted by Mrs. C. L. Amick. A sumptuous dinner was enjoyed at 5:30.

JAMES A. WORK, JR., Secretary.

FLOYD COUNTY

Floyd County Medical Society met in regular session at the Tavern on Dec. 8, 1916. The following members were present: Drs. J. W. Baxter, J. E. Bird, C. P. Cook, R. W. Harris, A. P. Hauss, Jr., A. G. Kinberger, William Moore, J. Y. McCullough, P. H. Schoen, H. B. Shacklett, William Winstanley, and F. E. Wilcox. Dr. F. E. Wolfe, visitor.

After the regular routine of business had been transacted, the name of Dr. F. E. Wolfe was presented for membership in the society.

The president, Dr. Schoen, appointed the following nominating committee: Drs. Cook, Moore and Wilcox, who placed on nomination the following: president, Dr. W. L. Starr; vice president, Dr. Felix Hazelwood; secretary-treasurer, Dr. P. H. Schoen;

censors, Drs. E. P. Easley, J. Y. McCullough, and W. J. Leach. The nominations as presented were accepted and elected by acclamation.

Following the business session, the meeting adjourned, and the doctors were invited to the dining room where supper was served, and good fellowship reigned.

J. Y. McCULLOUGH, Secretary.

HUNTINGTON COUNTY

The regular monthly meeting of the Huntington County Medical Society was held in the Commercial Club rooms on Wednesday evening, Jan. 3, 1917, with Dr. M. H. Krebs, president, in the chair.

Minutes of previous meeting were read and approved. Roll call showed twenty-one members present. Visiting physicians present, six. Visiting nurses, five. The president and secretary of the Anti-Tuberculosis Society and a representative of the Commercial Club were present. The representative of the Anti-Tuberculosis Society requested the cooperation of the county physicians in the establishment of a tuberculosis clinic for the examination and care of the suspected tubercular cases. The plans of the tuberculosis society were given and received the endorsement and the society was promised the cooperation of the medical society.

The guest of the evening was Dr. T. C. Kennedy of Indianapolis who had been invited to read a paper. His subject was "Cancer of the Cervix of the Uterus." Dr. Kennedy gave a history of cancer and dwelt especially on the fact that the family physician should make an early diagnosis. He advocated the Percy treatment and radium, and said that waiting for a diagnosis made by sight and touch would be too late for operation. He also stated that cancer may occur from ages 20 to 70 years, but most cases occurred from 40 to 75 years, and that there are no subjective symptoms in the early stage and hemorrhage from vaginal discharge is one of the best signs, there being no pain in the first symptoms. Surgery is of little avail after this stage. Less than 5 per cent. are cured by operation.

He laid special stress on some of the remarkable results achieved by the treatment with radium, illustrating the same with a report of a number of cases so treated. He, however, sounded a note of warning by stating that some cases, however, do not respond to the treatment very much. He claimed that all cases were benefited somewhat, that pain was diminished and that hemorrhage is lessened. While still in its infancy favorable results from radium treatment were reported in cases of fibroid tumors and epitheliomas. Dr. Kennedy explained his method of administering radium treatment, the dosage and time. The paper was freely discussed by the members, and in closing the discussion, Dr. Kennedy desired to place himself on record as not limiting himself to the radium treatment for all cases but stated that he used such measures as were indicated in the various cases, surgical, Percy cautery, etc., but believed that in radium we had a powerful agency in the treatment of cancer.

A vote of thanks was extended to Dr. Kennedy for his paper. Following the meeting the members sat down to lunch, as guests of the new president, Dr. Krebs.

F. B. MORGAN, Secretary.

LAKE COUNTY

Annual meeting of Lake County Medical Society was held in St. Margaret's Hospital, Hammond, Dec. 14, 1916, at 8 p. m., Dr. Miltimore presiding. Attendance 25.

Applications for membership were received from Drs. W. A. Potts of Lansing, Ill., and Dr. Esther Ryerson of Gary. On motion the favorable report of the censors was received, and the applicants duly elected to membership.

Election of officers for 1917 resulted as follows: president, Ira Miltimore, Gary; vice president, T. W. Oberlin, Hammond; secretary-treasurer, E. M. Shanklin, Hammond; censor, three years, F. J. McMichael, Gary; delegates, W. F. Howat, Hammond, and E. E. Evans, Gary; alternates, J. W. Iddings, Lowell, and B. W. Chidlaw, Hammond; oration in medicine, E. M. Shanklin, Hammond.

Following the meeting the Sisters of the hospital served a buffet luncheon.

Adjourned. E. M. SHANKLIN, Secretary.

NOBLE COUNTY

At the annual meeting of the Noble County Medical Society, in the Circuit Court Room, Albion, the following officers were elected: president, J. W. Morr, Albion; vice president, F. C. Hardy, Kendallville; secretary, J. W. Green, Albion; treasurer, B. W. Miller, Albion; censors, C. B. Goodwin, Kendallville, J. W. Black, Ligonier, and J. H. Nye, Cromwell.

Dr. J. L. Gilbert presented a paper, "Quo Vadis?" In part, the doctor presented the following: Medical practice will, in the very near future, undergo a revolution. The hospital and the trained nurse will be brought to the people and within the means of the people. Hospitals must be and will be multiplied until they cover the field of medical activity, the same as high schools cover the field of educational activity. The poor and moderately poor cannot afford the nurse and hospital under our present social system, and it is a crime to pauperize them by making township charges of otherwise self-supporting people. Like other public utilities, such as court houses, ditches, high schools, roads and bridges, etc., hospitals should be established and maintained, conveniently and abundantly, by taxation of all the people. They cannot be established and maintained by Ladies' Aids, and thimble clubs. Legislation is needed to meet this economic situation. Lives are being lost and endangered constantly on account of the long distance necessary to transport cases, and the lack of means on the part of the poor, which prevents the employment of competent nurses, and keeps many a case out of hospital and under the most unfavorable environment.

Dr. Green presented a scholarly paper on Diphtheria. Among the points brought out by the essayist might be mentioned: The futility and unscientific attitude of many physicians in administering prophylactic treatment to well members of a diphtheria infected household, and then leaving them constantly exposed to the infection. Speaker recommends that they be immunized and then segregated. Emphasized the value of large initial doses of antitoxin, especially in laryngeal and nasal types of the disease, and the need of certainty of recovery before raising quarantine.

Adjourned.

W. F. CARVER, Secretary.



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"Thyroid preparations should
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Iodin—but in some samples I
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Sir James Barr
In British Medical Journal

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Non-Official Remedies, 1916, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-official Remedies":

MERCURIALIZED SERUM-MULFORD.—The following dosage forms of mercurialized serum-Mulford, described in New and Nonofficial Remedies, 1916, p. 192:

MERCURIALIZED SERUM-MULFORD, No. 5-A.—Each package contains one 8 Cc. graduated sterile glass syringe with sterile needle, containing the equivalent of 0.0055 Gm. ($\frac{1}{2}$ grain) mercuric chloride.

MERCURIALIZED SERUM-MULFORD, No. 5-B.—Each package contains one 8 Cc. graduated sterile glass syringe with sterile needle, containing the equivalent of 0.011 Gm. ($\frac{1}{2}$ grain) mercuric chloride.

MERCURIALIZED SERUM-MULFORD, No. 6-A.—Each package contains ten 8 Cc. graduated sterile glass syringes with sterile needle, each containing the equivalent of 0.0055 Gm. ($\frac{1}{2}$ grain) mercuric chloride.

MERCURIALIZED SERUM-MULFORD, No. 6-B.—Each package contains ten 8 Cc. graduated sterile glass syringes with sterile needle, each containing the equivalent of 0.011 Gm. ($\frac{1}{2}$ grain) mercuric chloride. H. K. Mulford Company, Philadelphia (*Jour. A. M. A.*, Dec. 9, 1916, p. 1759).

PERTUSSIS BACTERIN-MULFORD.—A pertussis bacillus vaccine (see N. N. R., 1916, p. 321). Pertussis Bacterin-Mulford is sold in packages of four syringes containing 50, 100, 200, and 400 million killed Bordet-Gengou bacilli. H. K. Mulford Company, Philadelphia (*Jour. A. M. A.*, Dec. 16, 1916, p. 1851).

PROPAGANDA FOR REFORM

IRON CACODYLATE.—While manufacturers appear most ready to take advantage of the present interest in iron cacodylate by offering this in the form of ampoules, etc., they have given little help to the A. M. A. Chemical Laboratory toward the establishment of standards for this arsenic compound. Manufacturers are ever ready to sell drugs of all sorts, but in view of the small demand for little used drugs, they cannot or will not safeguard the identity and purity of such drugs (*Jour. A. M. A.*, Nov. 25, 1916, p. 1593).

PLANT JUICE.—"Plant Juice" is a "patent medicine" which is said to yield an annual profit of \$90,000 to Col. Frank A. Dillingham of Cincinnati. The Milwaukee Health Department reports that, in addition to 20 per cent. alcohol, "Plant Juice" contains aloes, licorice with possibly a little cascara sagrada or senna. This nostrum is advertised as "beneficial" in anemic conditions, nervousness, sickness and debility, headache, backache, dyspepsia and various other ills (*Jour. A. M. A.*, Dec. 2, 1916, p. 1685).

DAKIN'S HYPOCHLORITE SOLUTION.—The following procedure is claimed to have superseded the previously published formulas: Stir 200 Gm. chlorinated lime into 5,000 Cc. ordinary water and let stand over night. Dissolve 100 Gm. anhydrous sodium carbonate and 80 Gm. sodium bicarbonate in 5,000 Cc. cold water and pour this into the chlorinated lime mixture, and shake for one minute. After one hour siphon off the clear liquid and filter it through paper. A portion of this must not become red if a little dry phenolphthalein is added to it (*Jour. A. M. A.*, Dec. 2, 1916, p. 1687).

TOXINOL.—Toxinol is a "syphilis remedy" marketed by the Hawes Chemical Co., Louisville, Ky. It is a

shotgun mixture characteristic of the days when syphilis was treated with haphazard mixtures of iodides, mercury and vegetable "alteratives." The Council on Pharmacy and Chemistry has examined Toxinol and the claims made for it, and reports that Toxinol is ineligible for New and Nonofficial Remedies because it is an irrational combination of drugs, marketed under a name that is non-descriptive of its composition and with unwarranted and misleading claims (*Jour. A. M. A.*, Dec. 2, 1916, p. 1687).

TOXICITY OF SALVARSAN.—From the reports of O. S. Ormsby and J. H. Mitchell, A. M. Moody and J. D. Ellis in *The Journal A. M. A.*, Dec. 9, 1916, it would appear that some of the salvarsan recently on the market has been unusually toxic (*Jour. A. M. A.*, Dec. 9, 1916, p. 1764).

MAYR'S WONDERFUL STOMACH REMEDY.—More than a year ago the proprietor of Mayr's Wonderful Stomach Remedy pleaded guilty in the federal court to the charge that the claim that the nostrum was a cure for gallstones, appendicitis and all stomach, liver and intestinal diseases was false and fraudulent. Nearly a year later a placard over the store window of the Mayr establishment the following appears: "Mayr's Wonderful Stomach Remedy Is the Only Known Cure for All Stomach, Liver and Intestinal Complaints. One Dose Will Prove It." The federal Food and Drugs Act should have its scope extended so that all advertising for a product shall come under the purview of the Act (*Jour. A. M. A.*, Dec. 9, 1916, p. 1774).

MORE MISBRANDED NOSTRUMS.—The following nostrums were found to be sold with false and fraudulent therapeutic claims: E. K. Thompson's Barosma Compound was found to be a watery-alcoholic solution containing bromid of potassium 3.85 per cent., potassium acetate 2.6 per cent., extract of buchu and sugar 18.4 per cent. It was sold under the inferential claim that it was a cure for Bright's disease, inflammation of the kidneys, etc.—Sayman's Vegetable Liniment Compound, sold for the treatment of deafness, fever, ague and even sore nipples, toothache and chilblains, was found to be a hydro-alcoholic solution of camphor, chloroform, capsicum, oil sassafras, ammonia and plant extractive, and probably turpentine.—Knorr's Genuine Hien Fong Essence or Green Drops was found to contain 69.72 per cent. alcohol (by volume), 0.35 per cent. ether (by volume), 0.28 gm. nonvolatile matter per 100 Cc., flavored with oil of spearmint. It was said to be an excellent remedy for diseases of the stomach and bowels and many other ailments (*Jour. A. M. A.*, Dec. 9, 1916, p. 1775).

ARSENOBENZOL (PHILADELPHIA POLYCLINIC).—Dr. Schamberg explains that the Dermatologic Laboratory of the Philadelphia Polyclinic availed itself of the opportunity to supply their product when salvarsan was not obtainable. Having so served this purpose in the interest of humanity and the public health, the marketing of their product was discontinued when the German product became again available. The laboratory is not established for commercial purposes and could not afford to become embroiled in patent litigation which would no doubt be instituted by the owners of the salvarsan patent (*Jour. A. M. A.*, Dec. 9, 1916, p. 1776).

SULFO-SELENE-WALKER.—The New York *Tribune* explains that it was caught "napping" when it gave space to a discussion of Dr. C. H. Walker's cancer treatment, "Sulfo-Selene." It explains that, while there is probably no single false statement in the published interview self-sought by Dr. Walker, the

impression sought to be conveyed that Sulfo-Selene will cure cancer, rests on no such foundation of evidence as to justify a reputable and responsible physician in setting it forth in the public prints. The *Tribune* explains that Dr. Walker's preparation has failed to obtain that recognition which would have given it a scientific status, namely, recognition by the Council on Pharmacy and Chemistry (*Jour. A. M. A.*, Dec. 16, 1916, p. 1864).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been held misbranded under the federal Food and Drugs Act, chiefly because of false and unwarranted therapeutic claims. Mrs. Winslow's Soothing Syrup, declared to contain 5 per cent. alcohol and $\frac{1}{40}$ grain morphine sulphate to each fluidounce together with oil of aniseed, caraway, coriander, jalap, senna and sugar syrup (as now marketed the preparation contains no opiate).—Johnson's Iodized Extract of Sarsaparilla found to be a simple vegetable preparation with only an appreciable amount of potassium iodide.—Matusow's Nulfeys contains 51.8 per cent. sodium salicylate. An alkaloid, probably berberine, and emodin were present (*Jour. A. M. A.*, Dec. 16, 1916, p. 1865).

BROMIN-IODIN COMPOUND.—This preparation was submitted to the Council on Pharmacy and Chemistry with the following formula: "Iodin Gr. 1, Bromin Gr. $\frac{1}{4}$, Phosphorus Gr. $\frac{1}{100}$, Thymol Gr. $\frac{3}{8}$, Menthol Gr. $\frac{3}{8}$, Sterilized Oil fl. dr. 1." According to the promoters Bromin-Iodin Compound is "A Powerful Anti-Tubercular Agent for Hypodermic Use in Pulmonary and Laryngeal Tuberculosis . . ." The Council declared the preparation ineligible for New and Nonofficial Remedies because the "formula" was impossible if it is intended to indicate the composition of Bromin-Iodin Compound; and meaningless if it is intended to indicate the ingredients used in the manufacture; and also because there was no satisfactory evidence for its therapeutic efficiency (*Jour. A. M. A.*, Dec. 23, 1916, p. 1958).

CASTROX.—Castrox is a castor oil emulsion claimed to contain castor oil 50 per cent., glycerin 10 per cent., with water and emulsifying agents. It was said to be prepared by a "unique three-day process with special apparatus and is more than 'just an emulsion.' It is a MUTUAL emulsion, for the oil and aqueous solution have been united without 'forcing' . . ." The Council held Castrox to be an unessential modification of an established article, marketed under a proprietary name and with claims which give a false value to a simple castor oil emulsion, and therefore not admissible to New and Nonofficial Remedies (*Jour. A. M. A.*, Dec. 23, 1916, p. 1956).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" were found misbranded under the Food and Drugs Act in the main because unwarranted and false therapeutic claims were made for them: Smith's Kidney Remedy, found to be a hydro-alcoholic solution containing glycerin, potassium acetate, trace of alkaloid, laxative extractive plant drugs.—Hill's Syrup of Tar, Cod-Liver Oil Extract and Menthol, essentially a sweetened hydro-alcoholic solution containing small amounts of chloroform, menthol, morphine and tar; ipecac, tolu, cannabis indica and wild cherry were indicated; cod-liver oil was absent.—Mag-No Brand Liniment, essentially an aqueous solution of ammonia, flavored with sassafras oil and colored.—Radway's Sarsaparillian, essentially a watery-alcoholic solution of sugar, potassium iodid, arsenic, a trace of alkaloids and certain plant substances.—Dr. Shoop's Diphtheria Remedy, consisting of sugar

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LACTEOL.—This appears to be a lactic acid ferment preparation. The advertising material is of the usual extravagant character. The preparation is made in Paris and, since the bacteria lactic acid ferment preparations are short lived, may be inactive by the time it is used here (*Jour. A. M. A.*, Dec. 23, 1916, p. 1959).

SODIUM CACODYLATE IN SYPHILIS.—While Nichols has shown that sodium cacodylate is worthless as a spirocheticide, it is still being used in the treatment of syphilis, and it is the essential constituent of venarsen, a proprietary syphilis remedy. As a result of extensive clinical trials, Dr. H. N. Cole concluded that sodium cacodylate has no spirocheticidal value. At the utmost it has perhaps a slight action on the papular and nodular syphilids, but in no case is this effect to be compared with that produced by mercury

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and potassium iodid. In cases of syphilis with mucous patches sodium cacodylate is worse than useless (*Jour. A. M. A.*, Dec. 30, 1916, p. 2012).

TANRET'S PELLETIERINE.—The exact composition of Tanret's Pelletierine is not known, but is believed to be similar to the pelletierine tannate of the U. S. P. This is said to be a variable mixture of the tannates of four alkaloids of pomegranate. As only two of the alkaloids have tenifuge properties the activity of the different preparations varies with the proportion of these alkaloids which are present (*Jour. A. M. A.*, Dec. 30, 1916, p. 2030).

O-DO-CURE.—The A. M. A. Chemical Laboratory reports that a solution essentially similar to this "perspiration remedy" may be made thus: salicylic acid 1 grain, boric acid 30 grains, alcohol 3 fluidrams, perfume sufficient, water to make 1 fluidounce (*Jour. A. M. A.*, Dec. 30, 1916, p. 2030).

MERCURIC BENZOATE.—When mercuric benzoate is dissolved in sodium chloride solution for injection purposes a complex mercuric compound is produced in which the mercury is a part of the acid radical. It is safe to assume that the therapeutic effect of a given weight of mercury as mercury benzoate in a stated volume of sodium chloride solution will be the same as that of the same weight of mercury in the form of mercuric chloride in the same volume of sodium chloride solution (*Jour. A. M. A.*, Dec. 30, 1916, p. 2030).

QUININE INJECTION.—By taking proper precautions the number of cases of abscess formation and necrosis from the injection of quinine may be greatly reduced, but the danger of their occurrence cannot be entirely eliminated. For this reason all authorities agree that the administration of quinine by injection should be confined to the most urgent cases of pernicious malaria. The two most important precautions are, that the injection must be intramuscular and that the solution should be dilute—not stronger than 10 per cent. The best salts are quinine dihydrochloride and quinine and urea hydrochloride (*Jour. A. M. A.*, Dec. 30, 1916, p. 2030).

THE STATUS OF ANTIPNEUMOCOCCUS SERUM.—The injection of the proper antipneumococcus serum in pneumonia caused by pneumococcus Type 1 is believed to be beneficial, but the serum treatment of pneumonia is still in the experimental stage. The pneumococci fall into various groups according to their immunologic relations and the first requisite for a rational use of the serum treatment of pneumonia is the determination of the particular type of the pneumococcus concerned in a given case (*Jour. A. M. A.*, Dec. 30, 1916, p. 2030).

BOOK REVIEWS

THE PRACTITIONERS' VISITING LIST FOR 1917. By Lea & Febiger, Philadelphia and New York.

This little book is invaluable to the busy physician. It offers a simple and complete system of keeping the records of daily practice. In addition to the ruled pages for daily calls and their needs, general memoranda, addresses, cash accounts, etc., it contains regular spaces for data for permanent records, such as deaths, births, etc. It is a book of practical convenience, and it is almost indispensable to the busy physician.

PROGRESSIVE MEDICINE. Volume XIX, No. 4 (December, 1916). Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College. Lea & Febiger, Publishers: Philadelphia and New York.

Practically everyone who has had to review the medical literature of the past year has complained of the difficulty of obtaining foreign publications. Goodman, who reviews the diseases of the digestive tract and allied organs, the liver, pancreas, and peritoneum, presents the situation very plainly, and shows how he has attempted to overcome the difficulty as best he could.

Austin again reviews diseases of the kidneys, and Bonney, genito-urinary diseases.

Bloodgood's full review of his subject is of unusual value and importance this time, especially his chapter on bone tumors.

Landis' review of the progress in therapeutics is the other contribution in this number.

AMERICAN PUBLIC HEALTH PROTECTION. By Henry Bixby Hemenway, A.M., M.D., author of *The Legal Principles of Public Health Administration*, etc. Indianapolis. The Bobbs-Merrill Company, Publishers. Cloth, \$1.25, net.

This book is dedicated to the "Women of America," in the hope of aiding them to protect the lives of their children. It is dedicated to them as "the power behind the throne," in the hope that they may use this power to secure the proper kind of health protection for their communities.

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THE MEDICAL CLINICS OF CHICAGO. Vol. II, No. 3 (November, 1916). Published Bi-Monthly by W. B. Saunders Company, Philadelphia and London.

In this volume are contained the clinics of three new contributors, each of whom is very well known in his specialty. Kretschmer discusses "The Treatment of Chronic Colon Pyelitis by Pelvic Lavage;" Smithies presents "Cases Illustrating Spasm at the Cardia and Cardiospasm Associated with Diffuse Dilatation of the Esophagus;" and Pusey talks on "Some Cases of Eczema from External Irritation." "Poliomyelitis" is discussed by two such eminent clinicians as Abt and Hamill. Hamburger gives quite fully the subject of "Chronic Ulcer of the Stomach and Duodenum;" Mix gives a splendid talk on "Pernicious Anemia." Tice and Williamson each present clinics of more than usual interest.

The variety of clinical material given in this issue, and the manner in which it is presented, ought to make this volume of the greatest interest and value to every practitioner.

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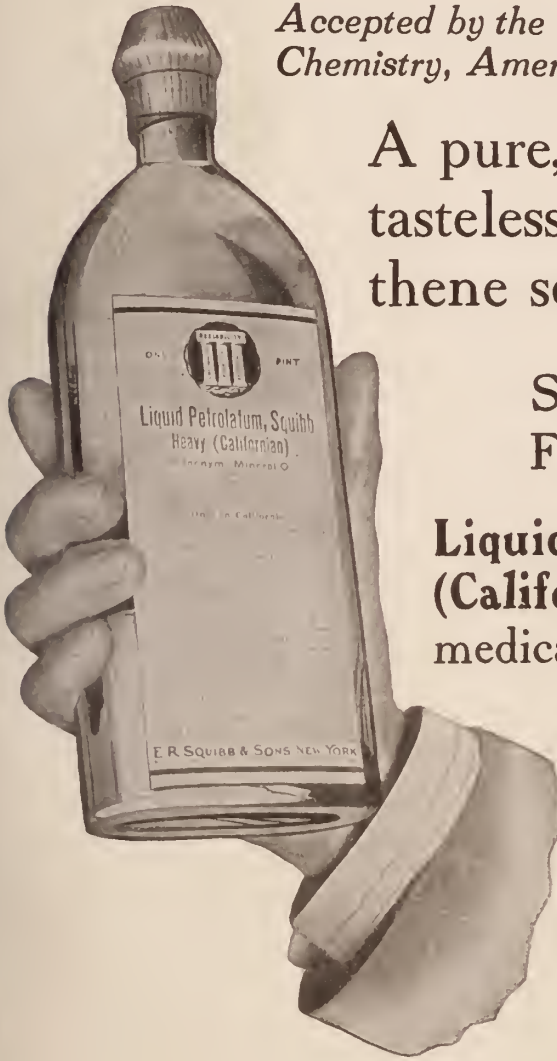
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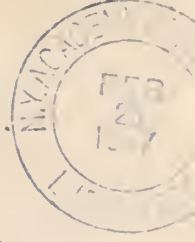
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THE JOURNAL

OF THE

Indiana State Medical Association

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ISSUED MONTHLY under Direction of the Council

VOLUME X
NUMBER 2

FORT WAYNE, IND., FEBRUARY 15, 1917

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CONTENTS

ORIGINAL ARTICLES		PAGE		PAGE
Concerning Certain Phases of Disease of the Lacrimal Apparatus. Wm. Campbell Posey, M.D., Philadelphia	43	The Nurse as an Anesthetist.....	65	
The Incidence, Diagnosis and Treatment of Visceral Syphilis. G. W. McCaskey, M.D., Fort Wayne, Ind.....	51	Editorial Notes	66	
Tuberculosis Plus. Alfred Henry, M.D., Indianapolis....	59			
EDITORIALS			SOCIETY PROCEEDINGS	
Late Syphilis	64	Indiana State Medical Association.....	77	
Pseudo Diphtheria Bacilli.....	64	Seventh Indiana Councilor District Medical Association..	79	
		Muncie Academy of Medicine.....	79	

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS ¹		MISCELLANEOUS	
	PAGE		PAGE
Fort Wayne Medical Society.....	81	Deaths	72
Elkhart County	81	News Notes and Personals.....	73
Johnson County	83	The Truth about Medicines.....	84
Lake County	83	Book Reviews	86
St. Joseph County.....	83		
Tiptecanoe County	83		

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OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME X

FORT WAYNE, IND., FEBRUARY 15, 1917

NUMBER 2

ORIGINAL ARTICLES

CONCERNING CERTAIN PHASES OF DISEASE OF THE LACRIMAL APPARATUS*

WM. CAMPBELL POSEY, M.D.
PHILADELPHIA

To attempt, before an audience of this kind, to delineate in formal manner the various diseases to which the lacrimal apparatus is subject, and to give their treatment, would indeed be absurd and without grace upon my part. It occurred to me, however, that a review of some of the experiences I have encountered in the treatment of this very common class of cases might be of interest and might be provocative of a discussion which would be mutually beneficial. There are a good many phases of lacrimal disease which are more patent to the rhinologist than the ophthalmologist, and he who combines these specialties should be in a magister position in treatment. As I am told that many in my audience are thus fortunately situated, I hope that before the hour has expired we may arrive at conclusions which may be beneficial in the treatment of this often vexatiously unsuccessful class of cases.

Before proceeding with the far more common diseases of the excretory apparatus I should like to refer briefly to that rather uncommon affection of the secretory apparatus termed Mikulicz's disease, or symmetrical lymphomata of the lacrimal and salivary glands. In this disease, the etiology of which is obscure, the lacrimal glands attain considerable size and may be palpated readily as they project from under the supraorbital ridges. In most cases there is a simultaneous enlargement of the parotid, sub-

maxillary and other salivary glands. I have observed two cases of this unusual disease, both occurring in colored subjects; indeed, all the cases which have been reported in this country have been negroes. Unlike the majority of cases in the literature, etiological factors were not wanting in the case illustrated by the photograph, for the woman was tubercular, syphilitic, and had sufficient dental decay and alveolar involvement to occasion buccal infection of the glands through the medium of the lymphatics of the mouth. Marked and rapid improvement was attained in this case by specific and tonic treatment. In my second case, also a tubercular colored girl, in whom both lacrimal glands were involved symmetrically, but without apparent involvement of the glandular system elsewhere in the body, treatment was less effective, the hypertrophy of the glands resisting all therapeutics. A total disappearance of the swelling occurred a year later, however, when the patient was receiving no treatment whatsoever.

Diseases of the excretory apparatus depend not infrequently upon congenital causes, certain conformations of the skull producing abnormally small lacrimonasal ducts. Thus, individuals with a scaphoid type of face, in which the orbits are shallow and the epicanthal folds are well developed, are frequent subjects of lacrimal disease; others with narrow faces and prominent noses are also predisposed. Such malformations are transmissible and one frequently sees in consequence a hereditary transmission of lacrimal diseases.

Imperforation of the septum between the lacrimonasal duct and the nasal chamber is a not infrequent congenital cause of dacryocystitis. The affection is usually unilateral and is attended by the collection of a small amount of yellowish white discharge at the inner canthus several days after birth. A false diagnosis of ophthalmia neonatorum is often made, and the condition unimproved by the usual treatment

* Presented before the Eye, Ear, Nose and Throat Section of the Indiana State Medical Association, at the Fort Wayne Session, September, 1916.

directed to that affection until the true nature of the inflammation is ascertained and relief afforded by breaking through the imperforated septum with a probe. This operation is a simple one, for after a simple dilatation of the canaliculus a No. 1 or 2 Bowman probe can be passed readily into the nose. One probing usually suffices, though in several cases I have found it necessary to repeat the procedure a second time.

Prelacrimal Abscesses. — Sinusitis may indirectly, by way of the nasal mucous membrane, be a frequent cause of disease of the lacrimal apparatus, but is the direct agent only in those rare cases where an empyema of one of the sinuses discharges itself into the sac, or, what happens more frequently, into the neighborhood of the sac, giving rise to phlegmonous inflammation of the tissues around the sac.

These prelacrimal abscesses may result from an empyema of the frontal sinus, as a consequence of an anomalous distribution of the cells, or, finally, from an abscess of the deeper parts of the orbit, the purulent matter gravitating into the region of the sac by the peculiarity of the insertion of the fascia. The differential diagnosis between these cases and true instances of lacrimal disease often is difficult, this being especially true of the class of cases described by Peters, in which there are all the signs of abscess, and the sac itself appears dilated, but where the Bowman incision and the passage of probes into the nose does not release the pus, the purulent matter escaping only after the probe is withdrawn and passed horizontally into the cells forming the inner orbital wall. Peters points out that there is actually an ectasia of the sac in these cases, which is occasioned by stoppage of the orifices of the sac by the pressure exerted externally by pus, which comes either from an empyema of the frontal or ethmoidal cells, from the maxillary antrum, or from a maxillary periostosis excited by a carious tooth.

Several years ago I reported a case of large lacrimal mucocele in a young colored man, occasioned by pressure exerted externally by the distended walls of the anterior ethmoidal cells, in consequence of the retention of mucus within that cavity. Extirpation of the sac was effected easily and completely by Meller's method, and, save the slight lacrimation which is the rule after extirpation of the sac, the patient had nothing to complain of. About a year later, however, following an attack of influenza, I was consulted again on account of a swelling which had appeared recently in much the same position as that previously occupied by the sac. Examination showed this swelling to be due to a dis-

tention of the anterior ethmoidal cells, for the walls of the sinus apparently had been pushed forward, and palpation gave the impression of fluid beneath the tense periosteum, the bony framework of the sinus evidently having been eroded away by long-continued pressure from dammed-up secretion within. An orbital incision was made over the distended cells and satisfactory drainage obtained by the passage of a drainage tube from the sinus into the nose. Healing was rapid and uneventful and there has been no recurrence of any inflammatory symptoms whatsoever during the five years which have elapsed since the operations were performed. It seems to me that the sequence of the double mucoceles in this case may be explained as follows: The patient, already predisposed by the anatomic formation of his skull to retention of the mucous secretion from the ethmoid cells by presumably too small avenues of exit, had doubtless had these completely closed from some catarrhal condition of his nose. In consequence of this obstruction to the orifice the mucus within the cells had slowly distended its lateral wall, thereby exciting gradual and continued pressure upon the lacrimal sac, displacing this structure from its position in the lacrimal groove and hindering the escape of its contents into the nose by a compression of the lacrimonasal duct and perhaps closing the canaliculi by a similar process. The lacrimal mucocele was extremely large, and none of its contents could be expressed either through the canaliculi or into the nose.

Lacrimal Obstruction; the Weeping Eye.— This heading, however, is misleading, for I think you will agree with me that in many cases the overflowing of tears from the conjunctival sac is dependent, not upon an active dam-like obstruction in the tear canals, but rather upon some lack of function in the delicate mechanism whereby the tears are sucked from the conjunctival sac and drained into the nose. In some cases the puncta, due to innervational disturbances in the supply of the orbicularis muscle, are not in close apposition with the globe and their suction action is lost; in others there is a relaxation in the internal palpebral ligament, in consequence of which the act of winking fails to facilitate the emptying of the sac. Just what changes occur in the tissues of the lacrimonasal apparatus in men past middle life I do not know, but I always have thought the persistent lacrimation so frequently encountered in this class of cases was due to faulty canalization rather than to an obstructed lumen. Perhaps I am wrong in this and the rhinologists

present may set me straight by advising me of nasal mucous membrane changes which occur in these individuals, which, by ascending disease, slowly limit the capacity of the duct and dam back the lacrimal secretions.

In the treatment of diseases of the excretory portion of the lacrimal apparatus, my plan of procedure is as follows:

1. Increased lacrimation without any apparent local cause to occasion it. The lids are in normal apposition to the globe, the puncta appear patulous, nothing can be expressed from the canaliculi and there is no apparent distention of the lacrimal sac. There is no disease of the eyeball or conjunctiva present which might give rise to an increased flow of tears, and refraction errors and all nervous disorders which are sometimes attended with increased lacrimation, such as exophthalmic goiter, neurasthenia and tabes, have been excluded. In this class of cases the punctum is dilated and the lacrimal passages gently washed with a boracic acid solution by means of an Anel's syringe provided with a very fine tip. If the fluid passes into the nose without difficulty, an astringent eye wash is ordered, and if the lacrimation still persists, the syringing process is repeated twice a week for several weeks. If at the end of that time, excessive lacrimation is still present, the patient is referred to a rhinologist, and if his examination is negative, or his treatment without result, I am then convinced that radical measures must be resorted to before the cure of the condition can be attained. The procedure which I almost invariably adopt at this stage is the insertion of a lead style into the lacrimonasal duct. After thorough cocainization of the conjunctiva, about 10 to 15 minims of 2 per cent. solution of cocaine are forced into the conjunctival sac and after giving time for the anesthetic to take effect, the lower canaliculus is slit up with a Weber's knife. It has been my experience that many failures in the treatment of lacrimal strictures are due to the location of the stricture in the canaliculus just before that tubule enters the sac, and if a Weber knife is used, which is provided with a curved tip, the stricture is not overcome and the sac remains unentered, the curved tip of the knife pushing the sac before it, as the blade of the instrument is made to cut its way out through the canaliculus. The stricture being still undivided, attempts at probing are futile, unless the operator forces his way with a small caliber probe through the stricture into the sac. A skilful hand can sometimes accomplish this. Oftener there is a false passage made, and the result of the operation is nil.

The operator having gained access to the sac, with the straight pointed knife, now enters the sac with a Levis or other dilator and pushes this instrument through into the nose. This is usually accomplished with ease and with the employment of but little force. The dilator is permitted to remain in the sac for a few minutes and then is withdrawn slowly, a leaden style being immediately introduced in its place by the aid of a Zeigler depositor. The operator should conform the length of the style to the apparent length of the duct before the operation, and should also approximate the right angled shank to the length of the canaliculus before slitting up that structure. The style in situ, the right angled shank should be made to fit nicely into the divided canaliculus, to prevent subsequent healing and closure of this tubule and to provide for drainage. A bandage is applied and the patient is told to flush the eye hourly with boric lotion, and to apply ice compresses for an hour or two, until the swelling and pain of the operation have subsided. Neither of these is great, the trauma being slight. Such styles may remain in position for months without causing any discomfort or disfigurement. My rule is to remove them at the expiration of three or four months, when in the majority of cases a cure, or at least a partial cure of the lacrimation will be found to have been effected. If the lacrimation still persists, I usually pass a large probe once and if this is unsuccessful, I advise the removal of the sac. I have long ago given up the graduated probing so much in vogue years ago, for my results were uniformly bad, whether I employed large or small probes, and I was unwilling to submit my patients longer to the pain caused by a procedure of such doubtful value.

A very rare complication following probing occurred once in my practice, when a chronic inflammatory tumor, with cyst and giant-cell formation in the floor of the orbit, and connected with the lacrimal sac, arose after false passages of lacrimal probes. This operation had been performed by another ophthalmologist a year previous to my observation of the case. There was marked swelling of the lids, and the lids and skin adjacent to them had been discolored for weeks by the blood which had invaded the tissues under the skin following the probing. As soon as the pain consequent upon the trauma of the operation had subsided, the patient noticed that much of the swelling could be made to disappear by firm pressure, and she averred that this phenomenon was attended by a peculiar crackling sensation. Although the discoloration disappeared after a time, the swell-

ing and crackling sensation elicited by pressure remained, and she soon noted that the former began to assume a definite shape, taking the form of a more or less rounded kernel at the inner angle of the eye. She noted, too, that the swelling was not always of uniform size, being larger in the morning and growing smaller during the day, and also apparently enlarged by exertion. Blowing the nose did not seem to increase its volume. The mass was always larger when she lay down and at the menstrual epoch. In spite of various local applications prescribed by several oculists, the mass slowly increased in size, occasioning considerable disfigurement.

Examination revealed a swelling the size and form of a small butternut in the lower and inner part of the orbit, which gave the impression of a bunch of small angleworms to the examining finger. Firm pressure elicited crepitation and caused the swelling to disappear. The mass appeared to have no connection with the adjacent bone below or with the lacrimo-ethmoidal cells internally, which presented nothing unusual in their external appearance. The eyeball was normal, nor was there evidence of any involvement of its external muscles. Although the mass was thought to be vascular, having arisen in consequence of the injury done to the tissues by the probing, the patient was subjected to a careful study of the orbit and of the adjacent sinuses by the Roentgen ray, and by a rhinologic examination. The reports from both of these were, however, negative.

Rejecting any attempt at extirpation of the growth by electrolysis or other subcutaneous method, I determined to expose the mass by free incision into the orbit, and the patient was accordingly admitted into the Howard Hospital, where she was placed under ether narcosis. With the aid and counsel of my colleague, Dr. George B. Wood, a free curvilinear incision was made over the inner and lower margins of the orbit, and the dissection rapidly carried through the skin and subcutaneous tissues to the mass. This was found to be almost the size of a large butternut, to be free from connection with the bone, but to be closely blended with the tissues in the region of the sac and those directly below the conjunctival fornix. The surface of the mass was studded with numerous small cyst-like elevations, which crackled under the finger. No distinct capsule could be defined. The dissection and removal of the mass from the surrounding tissue were accomplished without great difficulty and with but little hemorrhage. A careful exploration of the region of

the sac revealed no trace of this structure, nor could any defect be found in the exposed walls of the orbit. The lips of the wound were coaptated by silk sutures and a pressure bandage applied. Healing was prompt, the scarring slight, and there has been no return of the mass. About as much lachrimation is complained of as is present after the successful removal of a sac, but pressure can elicit no crepitation and there is no swelling. The pathologic report showed a fibrotic stroma with occasional small collections of lymphocytes and scattered throughout numerous small cysts, varying in size and without contents. There was no capsule or definite limit to the mass. The walls of these cysts were made up of concentrically arranged fibrous tissue and lined with a thick layer of epithelioid cells, though in the larger cysts this layer was thinner and less well marked. Some of the smaller cysts were apparently occluded by these epithelioid cells and showed very little fibrosis. Numerous foreign body giant-cells were present, more commonly in the smaller cysts, though occasionally very large giant-cells, flattened out apparently by some form of pressure in the cyst cavity, could be observed in the walls of the large cysts. Dr. Wood was of the opinion that the specimen was not a true tumor, but the reaction of tissue to some form of foreign body irritation. From the history of the case, the deduction is reasonable that at the time of the operation upon the nasolacrimal duct the walls of the lacrimal sac or part of the duct were torn and in some way air was forced into the tissues of the lower lid. Subsequent inflations of this tissue due to blowing the nose, etc., kept this opening patulous, and either the pressure of the air in the tissues or the forcing in of lacrimal secretion and minute foreign bodies produced a reaction in the tissues with the formation of giant-cells. In the smaller cysts the process is apparently one of obliteration, but it is probable that as long as a communication with the nasal duct was kept up, pressure in the larger cysts would prevent their closure. The larger cysts apparently communicate with each other, though intercommunication of the smaller ones is not shown.

Dr. Wood says that as far as he is aware the specimen is unique, and, speaking from my own experience and after a fairly comprehensive review of the ophthalmic literature bearing upon orbital and lacrimal conditions, I would substantiate this opinion. The entrance of air into the tissues of the orbit following fracture of one of its walls is a common condition, but the em-

physematous condition soon disappears and no complications follow. Serous cysts may at times follow hemorrhages into the orbit resulting from degeneration of a blood-clot, and in very exceptional cases emphysema of the orbit has arisen in consequence of gangrenous decomposition of fluid which has escaped into the tissues after a penetrating wound. In the case under consideration, however, the pathologic findings were not that of a broken-down clot, and there is no history of a phlegmonous inflammation. The air doubtless entered the tissues in the region of the sac, through a small fissure or fissures in the inner orbital wall, in consequence of the false passages of the probes, and the neoplastic mass or air tumor, as it might be designated, arose, in all probability, as Dr. Wood has surmised, by the reaction in the tissues neighboring upon the sac to some form of foreign body irritation.

2. *Acute Dacryocystitis*.—After the administration of a general anesthetic, gas in many instances, the lower canaliculus is expressed by pressure on the swollen lid, and a style inserted after the manner just described. This one operation gives exit to the pus, overcomes the stricture and provides drainage at the same time, and is much to be preferred in my judgment to the old method of incising the sac from without and later overcoming the stricture by probing. I have operated on all my cases of acute dacryocystitis in adults by this plan for many years, and never have had one untoward result.

3. *Lacrimal Stricture with Catarrhal Discharge*.—Syringing with astringent washes and the instillation of a 1 or 2 per cent. solution of ethylhydrocuprein into the conjunctival cul-de-sac several times daily is my usual procedure. The administration of the latter solution is in most cases purely empirical, and I have found it highly efficacious in many cases of catarrh of the sac in which pneumococci are not found. Failure after two or three weeks of this treatment is followed by extirpation of the sac.

4. *Mucocoele of the Sac, with Tightly Enclosed Contents*.—Extirpation of the sac is advised in all such cases.

Extirpation of the Lacrimal Sac.—The indications for the removal of the sac have been given. The method I employ is that outlined by Meller, and the success of the operation depends upon a strict adherence to his technic. The first essential is the control of pain and bleeding by a free use of novocain and adrenalin. I apply nine parts of a 2 per cent. solution of the former

to one part of a 1 to 2,000 solution of the latter. The Pravaz syringe recommended by Meller is clumsy and provided with too large a needle. The ordinary hypodermic needle suffices. I usually empty the contents of one barrel just under the skin, one half below and the other half above the canthal ligament. The contents of the second barrel are injected into the deeper tissues above and below the ligament. Care should be exercised to avoid injuring the walls of the sac with the needle. After incising the superficial tissues, and parting the lips of the wound with Meller's speculum, the sharp teeth of which I have replaced by dull ones, to avoid possible injury to the cornea in case of slipping, I search carefully for the internal palpebral ligament, as I have found this the most valuable landmark in the operation. The ligament once found, the position of the sac just below it is readily ascertained, and it becomes a simple matter to divide the ligament and to separate the inner wall of the sac from the bony margin of the orbit by the points of a closed pair of scissors. More difficult is the separation of the outer wall of the sac, on account of the danger of getting into the orbital fat and obscuring the field of operation. After freeing the lateral portions of the sac, the sac is pulled forwards by a stout pair of forceps and the duct divided as far down in the canal as possible. The division of the apex of the sac is left until the last, as the few rapid cuts of the scissors necessary to accomplish this are often followed by considerable hemorrhage. After curetting the lacrimonasal duct, the lower canaliculus invariably should be slit up and curetted throughout its entire length, to destroy its mucous lining, and to obviate leaving any possible focus of infection. Healing is prompt, and in but one case, where a keloid overgrowth marred the cosmetic result, have I had any appreciable scarring. I have done the operation a great many times and find it one of the most satisfactory in eye surgery.

And now, gentlemen, I appeal to you for information and for your experience with the recent operations which aim to drain the sac directly into the nose by resection of the wall of the orbit.

I had purposed giving a review of the procedures advocated by various observers during the past few years. This, however, seemed futile in view of my ignorance of the subject, and as I have just said I hope the gentlemen present who have practiced these methods will give us their experience and their estimation of their value.

DISCUSSION

DR. FRANK A. MORRISON, Indianapolis: I want especially to compliment Dr. Posey upon writing a paper dealing with his personal views and experience, as I believe much more is to be gained in having an essayist of such ability tell us how he treats a disease or operates than to give us a résumé of that subject in general. If I understood the doctor rightly, he stated that Mikulicz's disease occurred only in the colored race, but I have recently had a case in the clinic of this disease in a white woman.

It is possible to mistake suppuration in the neighborhood of the lacrimal sac for disease of this structure. I have made two such mistakes in each of which disease of the ethmoid cells was present, once in a case sent by Dr. Page, and another of my own in the last few weeks. In each case the mistake was discovered when trying to separate the sac from its bony surroundings, and the operation was completed by establishing free drainage into the nose with curettement of the cells.

In washing out the sac care must be taken in the choice of the solution used. Following the suggestion of a well-known member of the profession, I once injected a few drops of argyrol with extreme care into the sac, and notwithstanding I took every precaution to prevent abrasion of the mucous lining, one of the blackest eyes I ever saw followed, and I was only saved from a malpractice suit by the patient dying somewhat later from an operation for cancer.

I do not use a style for maintaining the patency of the duct for the reason that many of my patients live out of the city, and I have been afraid to leave this instrument in without supervision, but I am free to say that in the exceptional cases in which I departed from this rule no trouble followed. However, I always felt uneasy until I saw the patient later.

I do not regard the extirpation of the sac as being as easy as the written descriptions would imply, although in the hands of an operator as skilled as Dr. Posey, no difficulty might be met. I have now in mind the case of a small boy in whom both sacs were said to have been removed by one of the most noted operators of the West. I subsequently found both sacs present and discharging pus. In another the sac was thought to have been removed by an eminent professor of ophthalmology, but was subsequently taken out in another clinic.

I heartily indorse the doctor's plan of first detaching the duct in the canal and finishing up by detachment of the cupola of the sac. The latter is the place to expect hemorrhage liable to flood the field of operation and good surgery, it seems to me, would demand that it be approached last.

In my own work I proceed about in the manner of Dr. Posey with a few modifications. I always protect the eye from possible abrasion and subsequent infection by putting vaseline in

the eye and then bringing the lids together by a suture passed through the skin of the upper and lower lids and tied. After the operation this is cut and the lids released. After making the usual skin incision, I catch the duct as far down as possible and tie it off, cutting the duct as far down in the canal as I can reach. I then use the ligature with the attached sac as a tractor and keeping the parts on a stretch by pulling downward complete the dissection of the remainder of the sac. Should the latter rupture, I pack it with a little cotton soaked in bichlorid solution and proceed as if this accident had not occurred.

DR. THOMAS C. HOOD, Indianapolis: I feel that I can add but little to the very complete and able discussion of the subject by Dr. Posey. However, a few general impressions that I have gained from contact with these cases may be of some interest and help to stimulate the general discussion which a subject so important should have.

I have practically discarded the probe, the syringe and the lacrimal style in the treatment of both acute and chronic dacrocystitis, simply because the results obtained were not good. The use of the probe is limited to those uninfected cases of simple epiphora from partial or complete occlusion of the puncta or mild stenosis of the duct. I prefer in the chronic purulent cases to extirpate the sac, and to do the same thing in the acute cases where there is a lacrimal abscess, as soon as the inflammation is controlled by free drainage and the proper treatment. I prefer this not because it is an operation that we can get a reasonable fee for, but because it completely relieves the patient from a troublesome, nasty and dangerous affection in the shortest time.

I must plead guilty to not having used the procedure of establishing a drainage window or opening into the nose through the nasal side of the sac. I have not tried the procedure because the operation did not appeal to me. It did not appeal to me because after such an opening is established you still have the pyogenic lining of the sac, and you have a larger or a smaller portion below the level of the opening into the nose, forming a permanent receptacle for lacrimal secretion to act as a convenient culture medium for any germs that may pass that way. There are other disadvantages which, it seems to me, are of weight, such as the injection of air and pathologic nasal secretions through the artificial opening in the common effort to clear the nose of mucus. Dr. Harold Gifford's method of freely incising the sac and destroying it by swabbing with trichloroacetic acid is, I believe, a real advance, and can be used with advantage in those cases where difficulty in dissecting out the sac is anticipated.

DR. K. K. WHEELLOCK, Fort Wayne: There is another class of cases of lachrimation whose etiology is not so apparent as are those which

Dr. Posey has cited. The treatment of Dr. Posey's cases is of course surgical, with direct action upon the tear conducting apparatus. The cases which I am thinking of are reflex in character and arise from irritation of the nasal mucous membrane. In the ordinary obstructive lesion of the lacrimal apparatus the overflow of tears is rather constant, while in lacrimation of reflex character exposure to change in temperature, to wind and cold, humid atmosphere brings on the tearing. Express drivers, chauffeurs and drivers of horses and others exposed to out of door labor suffer very much. In warm weather the secretion of tears is balanced by evaporation and discharge through the natural channels, but when the weather is cold and damp the tears fairly rain down the face and cannot be carried away by the natural passages. I find upon examination of the nasal passages in three cases that we have hyperesthesia of the membrane, due in many cases to excessive acidity of the blood, and the use of milk of magnesium or bicarbonate of soda internally is of great benefit. In other cases deviated septum or exostoses are responsible. In such cases correction of the deformity and removal of the spur are needed. Reflexes are responsible for many anomalous conditions, and one is always repaid by bearing in mind that direct physical examination does not always reveal the cause of the symptoms. Some years ago I saw a child who was injured in a street-car accident, and amongst other results was a right facial palsy. She had the usual disturbance of lacrimation incident to the exposed eye, and when she would eat an apple the tears flowed freely over the cheek of this eye, while the other eye was perfectly dry.

DR. JOSEPH D. HEITGER, Bedford: I desire to call attention to a type of case which stimulates the conditions found in obstruction of the nasal duct and like it giving rise to epiphora. Hyperphoria may be the real cause of an epiphora which in one case I distinctly recall had been subjected to a long course of probing of the lacrimal passages without success before consulting me. Examination showed three degrees of hyperphoria which when corrected by a two-degree prism base down relieved the epiphora entirely. Stevens, in 1887, called attention to hyperphoria as a cause of epiphora, and if such cases are examined carefully the real cause will be found and the lacrimal passages acquitted. I would suggest that all cases of suspected lacrimal passage disease be subjected to an examination with the phorometer as the first step in the routine handling of such cases. It requires but a few moments and is of the greatest importance in differential diagnosis.

DR. GEORGE K. KEIPER, Lafayette: The question is, when to probe and when not to probe. I am unwilling to give up the use of the probe. But its use is deferred until failure has followed the use of the lacrimal syringe in dilatation of the stricture of the tear duct. As a rule, it is

my own experience in non-purulent cases, that the probe is necessary but once, and thereafter the syringe will accomplish all that dilatation can accomplish. Slitting of either canaliculus should be rarely performed. The canaliculus can as a rule be easily dilated sufficiently to admit the lacrimal syringe tip.

As to styles: We must remember that the style in the tear duct is a foreign body, never intended by Nature to be placed there, at least for any great length of time. This does not mean that I never use them, for I do sparingly and for a brief space of time only.

It is possible to teach the patients to wash out their own tear ducts, and this is my procedure: The patient receives a prescription for a 2 per cent. solution of boric acid in water to use the first thing in the morning and the last thing at night. The patient is instructed to lie flat on the back. At the inner canthus is now a space which will hold a teaspoonful of the medicine. The patient is instructed to pump the medicine into the canaliculus, whence it will flow into the lachrymal sac and thence into the nose through the tear duct. Thus these patients can accomplish much for themselves and relieve us of much responsibility.

However, the cause of the strictures is very rarely resident in the eye. The nose must be carefully examined in each instance, for the cause is most likely to be found in some abnormality therein. If a cure is to be expected, that abnormality must be removed or corrected. Thus has Dr. Posey brought ophthalmology to wed rhinology. The tears flow down through the tear duct into the nose, and the inflammation in the nose travels up through the tear duct to produce stricture.

To say the least, however, all treatment is so often disappointing. I once heard Dr. James L. Thompson truthfully declare in a meeting of the Indiana State Medical Society, that we would dilate the tear ducts until they would be as large as elephants only to find after the first cold in the nose that the former stricture has reformed as tight as ever, so bad as to again require the offices of the oculist.

DR. H. E. GLOCK, Fort Wayne: So far it has never been my experience to find trouble of this sort in the widely dilatable duct in a large bony passage. I have never found any of these weeping eyes through the ducts of which I could pass the larger Theobald probe. They can be forced through by fracturing the bone, but nothing can be gained by that. I have never used a general anesthetic, but use cocaine solution. I have used the style and at the present time have a patient in whom I am using the grooved style and I find that after leaving it in position a week, the groove does contain a certain amount of deposit. I remove the deposit and replace the style, and when the patient returns I again have to remove it. The style is in such position in the duct that you can feel in the nose with a probe and touch the style.

Patients are often injured by injudicious probing. My experience has been that it is easier to probe if we do not start with too small a probe. It is better to start with the largest size that you think you can use, reducing the size if necessary. It is a safer rule to start with the larger probe than to start with a smaller size and work up. I always feel for the tip of the probe within the nose, and can easily thus prove to my own satisfaction that I have not torn through the mucous membrane, and instead of following the duct down, made a false passage which ends in a blind pocket.

DR. GEORGE W. SPOHN, Elkhart: I enjoyed the paper very much, and if the essayist is correct in the etiology, I have been wrong in my conclusions. I supposed lacrimal disease was due largely to the very small opening through the bridge bone. It has been said that the disease is found more frequently in men than in women. Many persons are born with hypermetropia which will cause photophobia in most cases. Men being out doors so much more than women naturally will develop photophobia more than women. The unnatural contracture of the punctum will drain the eyes out, instead of down through the nose. This will cause the small punctum found in elderly people, and in those whose life is out doors or exposed to bright sunlight.

As proof of the small opening through the bone, it was my privilege to examine 150 skulls in a Chicago instrument house. (These were just brought from abroad.) In some of the skulls the bony nasal duct was too small for a Bowman's No. 1 probe to be passed. In others the opening was large enough for a small lead pencil to pass through. In those who have the extremely small bony opening lined with a mucous membrane, trouble should be expected as soon as there would be any nasal trouble, or if the natural nasal suction power is lost.

If the nasal bony canal is abnormally small, nothing will give relief, only complete extirpation of the sac. The passing of probes is not only painful, but also uncertain in many cases. It is barbarous to punish a patient by passing a No. 6 probe without an anesthetic. I never saw a more pitiable case than when a physician passed a No. 6 probe through a little child's nasal duct. The passing of large probes will denude the epithelium, and when the epithelium layer is removed the canal cannot properly functionate. Strictures will form and the passing of the probes must be repeated again and again.

Will Dr. Posey please explain how he treats children under one year having the punctum closed?

DR. ALBERT E. BULSON, JR., Fort Wayne: I am pleased to hear Dr. Posey recommend the wearing of styles in suitable cases. I think that it was in Dr. Posey's clinic where I got the idea of using the ordinary fuse wire for making

styles. I keep different sizes of wire, and, as the wire is very soft and pliable it can be cut easily with cutting forceps, smoothed off around the edges, and shaped to fit any canaliculus. These styles may be left in the nose almost indefinitely, and I never yet have seen any bad results through neglect in having the styles removed. It is not uncommon for me to insert a style in a patient coming from a distance and not see the patient again for from one to three months. One of my patients wearing a style went to the Pacific coast and did not return for a period of three years, during which time the style was not removed, and in fact finally was forgotten. I removed the style with no difficulty, found it perfectly clean, and during the time that the style was worn the patient had experienced no particular trouble from epiphora. My experience with the grooved style is that the style proves irritating and is more apt to be burdened with concretions. It is my practice to have the style worn for a few weeks and then it is removed and not replaced unless the lumen of the duct appears to be occluded again. Probing is painful, but it seems to me that it is necessary in the first treatment of some of these cases. However, I have saved my patients much discomfort by using the style after the first probing, and removing the style as often as necessary for cleansing purposes.

I am distinctly opposed to the indiscriminate removal of the lacrimal sac, for conservative treatment will cure many of these cases of obstructed lacrimal drainage. However, the use of very large probes should be condemned, as also the continued use of probes of any size when such treatment proves painful to the patient. As a matter of fact the repetition of the pain in passing probes is a good indication that the best results are not being secured. The wearing of a style is not painful or uncomfortable for the patient; it does away with the necessity of probing, and accordingly facilitates the employment of cleansing or therapeutic measures. If, after due trial, the style does not give satisfactory results, it is time to consider the advisability of removal of the sac. The exceptions are those cases where it is impossible to establish an opening into the nose through the natural channels, or where there is an active dacryocystitis which is not promptly relieved by appropriate treatment, and which menaces the integrity of the eye.

DR. POSEY (closing): I have never seen injury to the epithelial lining of the canaliculus from the use of styles. The chief thing is to be assured that the lead wire rests on the floor of the nose, and that the right angled shank lies flat in the canaliculus.

Again I desire to express my appreciation of the invitation of your Chairman to address this body of specialists, and I thank you for the cordial reception, and the kind treatment accorded me in the discussion of my paper.

THE INCIDENCE, DIAGNOSIS AND
TREATMENT OF VISCERAL
SYPHILIS *G. W. McCASKEY, M.D.
FORT WAYNE, IND.

The field of clinical medicine, during recent years, has been the stage of many a history-making drama. From the laboratory of experimental medicine, through the laboratory of clinical medicine, to the clinical ward great events have followed each other in rapid sequence. The germ theory of disease which has very largely made these things possible has been established within the memory of myself and many of my colleagues. The conquest of diphtheria, of malaria, of bubonic plague, of meningococcus meningitis — these are but a few of a long catalogue the mere recital of which would be as tedious as it would be superfluous and irrelevant.

When the problems of syphilis, to some of which I now ask your attention, are fully comprehended, I believe that in spectacular interest, in humanitarian and sociologic bearings, in the covert chamber of horrors which they reveal, in the mingled hope and despair with which they veil the future, they will occupy a position of first importance.

The incidence of visceral syphilis cannot be separated from that of syphilis in general. We have scarcely recovered from the astonishment of finding that a large percentage of the population were harboring tubercular foci, active or latent, large or small. We are now facing a similar situation in regard to syphilis. The introduction of the Wassermann test as a rather routine procedure in general diagnosis has given remarkable results. Routine Wassermans for instance, made by McLester in 300 patients gave a positive result in fifty-six, or 18.8 per cent. Of these fifty-six cases, only twenty-two, or 39 per cent., gave a definite history of syphilis; thirty-four, or 61 per cent., were latent, giving no history of syphilis either direct or indirect. Routine Wassermans made by United States Army officials have given very similar figures — positive results being obtained in about 20 per cent. For some time in my diagnostic work I have been making a routine Wassermann in practically every case. Recently I have endeavored, so far as possible, to have four complement-fixation tests made in each case, namely, two Wassermans, one with the plain and the other with the cholesterinized antigen; one Neisser complement-fixation, and one tubercu-

losis complement-fixation, which, while not generally accepted, I believe to be quite worth while. As a result of this and similar work we seem justified in concluding that about one fifth and probably considerably more of the total adult population is suffering from some form of syphilis which in a large majority of cases is latent. It is well recognized by all serologists and clinicians that a single negative Wassermann test does not exclude syphilis. It follows, therefore, that the number of positive Wassermans obtained in a routine way is smaller than the actual number of syphilitics existing. It is often necessary to make a diagnosis of syphilis with a negative Wassermann. Its complete absence in undoubted cases has been repeatedly observed. Gotheil, for instance, reports a case of undoubted syphilis of the malignant type, in which twenty Wassermann tests were made, both before and after treatment, every one giving a negative result. Fonss, in a study of 192 cases of syphilis, found negative Wassermans in ten of 172 secondary cases, and two of twenty tertiary cases. I could report a number of clinical histories of this sort. For instance, a man, aged about 40, came to me a year ago with symptoms of organic brain disease. Wassermann tests of both blood and spinal fluid were negative. There was, however, a moderate pleocytosis with slightly increased globulin, and the patient admitted having had a primary sore followed by some secondaries. He was placed upon active treatment and after a month or thereabout developed positive Wassermans in spinal fluid, and later in the blood, doubtless the so-called provocative result, which thus furnished belated confirmation of the clinical diagnosis. The patient was in the hospital practically bed ridden and in a serious condition, and probably would have died had therapeutics awaited a positive Wassermann. He has made a relative recovery and is now able, after a year's treatment, to resume his occupation restored to comfort and economic efficiency.

There is another group of syphilis cases, how large, I do not know, like the case cited by Gotheil, in which treatment will give clinical results without developing a provocative positive Wassermann. I realize that this is somewhat dangerous ground, for effective antiluetic treatment is a two-edged sword. We must, however, face the facts and trust to the wisdom and caution of the medical profession to solve the clinical problems as they arise, in the best interest of the patient.

The following outline of a case history will serve as an example of this group of cases. A young married man, aged 28, was referred to me for diagnosis and treatment. He was ex-

* Read before the Indiana State Medical Association, Fort Wayne, September, 1916.

tremely nervous, had insomnia, conduct very abnormal, unbearable head sensations, etc. He was growing worse rapidly and seemed on the verge of requiring institutional restraint and treatment. The blood Wassermann was negative. The spinal fluid showed a marked pleocytosis—42 cells—but the other tests made, including Wassermann, globulin, and Lange gold chlorid, were entirely negative. There was a definite history of a venereal sore followed by sore throat. It seemed to me that we had everything to gain and nothing to lose by ignoring this negative Wassermann and acting upon the history and symptoms supported only by the pleocytosis. The patient began improving at once on vigorous treatment, and now, after some four months' time is apparently nearly normal and at work on his farm. He appears to be and says he is well excepting that his head does not feel quite right. The pleocytosis soon disappeared, but several Wassermann tests of both blood and spinal fluid continued negative. When confronted by heart, kidney or liver lesions with similar data, I pursue the same line of reasoning and action. As a rule, however, positive Wassermans are found later, and possibly would have been in this case if often enough repeated.

I believe that at this point a few additional selected case histories of different types will best illustrate the facts and viewpoints that I wish to present.

A business man of 50 consulted me on account of general nervous irritability with bloody stools, rectal irritation, and intestinal indigestion. He had consulted a well-known proctologist who had made a perfectly correct diagnosis of and was treating rectal ulcers by local applications. A routine Wassermann gave a strongly positive reaction. The patient was incredulous about syphilis, of any history of which he was undoubtedly ignorant, but readily consented to suspend all other treatment, except local sedatives, and try out antiluetic treatment alone. The result was striking. Within thirty days all indications of rectal disease had disappeared, and along with them had gone all the psychoneurotic manifestations which had oppressed him for years—long before the development of the local rectal disease. He said he could now really enjoy life, which had again become worth living.

The neurotic aspect of this case suggests another very important group. It probably includes a considerable, perhaps a very large number of the so-called "neurasthenias"—which are now known to be secondary, for the most part to chronic infections, toxemias, digestive or other metabolic disorders, etc.

A woman of 38 consulted me for "nervous exhaustion." She had no endurance, mental or physical, was unaccountably irritable, and had in fact the usual so-called neurasthenic syndrome, including a weak and irritable heart, the pulse ranging about 90 to 100 per minute. She had a positive Wassermann, and is improving under treatment.

These nervous symptoms standing alone have so often been found associated with syphilis that to me they at once suggest this as a possible if not probable cause, whether or not there is anything else in history or syndrome pointing that way.

The comparative incidence of syphilitic lesions in the various viscera which occupy the cranio-spinal, thoracic, and abdominal cavities is difficult if not impossible of exact determination. They may be focal or more or less diffused with a general predilection for vascular structures. Their character will depend upon the structure of the viscera involved. As a general rule, they, like other organic diseases, will be entirely latent up to the point where function is compromised. The symptoms will then depend upon the accidents of invasion. In most of the viscera, perhaps with the single exception of the parenchymatous lesions of the nervous system, they are not distinctive of syphilis. Focal lesions due to other infectious granulomata may obviously produce identical symptoms. There is something rather characteristic about the frequency of visceral hemorrhages, especially of the nervous system due to the prevalent vascular changes. Two of my cases illustrate this tendency. One was a man about 37, who, while in perfect health had a brain hemorrhage, followed a few weeks later by a second. The other was a woman of 25, who developed a sudden paraplegia, undoubtedly due to hemorrhage. In both, in spite of negative history or other symptoms, I immediately made a clinical diagnosis of probable syphilis, which was corroborated by positive Wassermans.

Two rather frequent and well recognized syndromes, namely, tabes and paresis are invariably due to syphilis. Confirmatory evidence may be confidently looked for in every untreated case. Syphilitic disease of the thoracic and abdominal viscera has not until very recently attracted even a small part of the attention which it deserves. The heart and large blood vessels stand next to the nervous system, or possibly on a par with it in clinical importance. The prevalence of syphilitic aortic disease, which perhaps practically always includes the heart, is one of the astonishing revelations of clinical medicine. Larkin and Levy in the course of forty-two necropsies, had nineteen cases

which had shown positive Wassermanns. Of these nineteen cases, seventeen, or nearly 90 per cent., had microscopical evidence of syphilitic aortitis. About 60 per cent. of these cases it is estimated die as a result of the aortitis. Gaucher and Brin claim that more than 85 per cent. of all cases of aortitis are due to syphilis.

Disease of the lungs is probably much more frequently due to syphilis than is commonly supposed. The same is true of the stomach. Gerster reports 1.6 per cent. of a series of 1,603 cases of stomach disease as due to syphilis. When we consider the extreme prevalence of stomach disease, and the practical certainty that many cases are overlooked, this means a great deal. Gastric ulcer is perhaps not rarely due to syphilis.

Both the liver and spleen are frequent sites of syphilitic disease. Considerable attention has recently been focused upon syphilitic nephritis. Stokes lately has reviewed the question, and says its importance is not fully appreciated. He thinks obscure cases with small amount of albumen are especially liable to be syphilitic; while Stengle believes that a certain parenchymatous type with a large amount of albumen and numerous granular and other casts is caused by syphilis.

The treatment of visceral syphilis is in general, and with one or two very notable exceptions simply the treatment of syphilis. This subject is too large to do more than discuss in briefest outline. The empirical results of mercury and the iodids were among the very gratifying and brilliant achievements of clinical medicine when the constructive genius of the really great Ehrlich startled the world by his proposed *therapia sterilisans magna*. This proved, of course, to be an iridescent dream, but even if the salvarsan preparations cannot destroy all the spirochetes in the body at a single blow and with a single dose, as Ehrlich had hoped, they marked an epoch in medical progress, and are now generally regarded as indispensable in the treatment of syphilis. They have not, however, supplanted the older methods of treatment. By the judicious combination of both the patient is best served.

I like to strike a very effective, and often decisive blow by intravenous medication with the salvarsan preparations, quickly followed by or sometimes alternated with intramuscular or percutaneous mercurial treatment. I prefer, and have used neosalvarsan almost exclusively, excepting for a time when forced by war conditions to use diarsenol. It possibly is not quite so spirocheticidal as salvarsan, but it certainly is less toxic, and after having given nearly one thousand doses, I am very well satisfied with

results. The future may suggest that in exceptionally obstinate cases, it might be well to supplement it with salvarsan. I think it safer to begin with small doses, say 2 to 4 dg., and always examine the urine twenty-four hours later. It may then be repeated in rapidly increasing doses up to 0.9 gm., or possibly more, at intervals of about five to seven or ten days, perhaps alternating with an intramuscular injection of mercury salicylate until therapeutic and serologic results are obtained.

The iodids must not be discarded, but a little later should be given freely, especially in all cases in which granulomata may be fairly assumed to exist. Their effect in breaking down these formations and thus, so to speak, uncovering the spirochaetes, seems well established.

Should we stop treatment, at least for a time, when the patient becomes Wassermann free? Perhaps so as a rule, but it is an undoubtable fact that a few severe cases of syphilis, urgently in need of treatment, do not give a positive Wassermann, while many such cases only give it intermittently. It is perfectly obvious, therefore, that there should be some, possibly many, exceptions to this rule. As in diagnosis, so in our therapeutic program, the Wassermann test is not the only court of appeal. The clinician must take all other data into account in forming judgment.

When a syphilitic lesion exists in any organ, for instance, heart or stomach, that organ should receive the same general or local treatment which would be accorded to it in other than syphilitic disease. It seems unnecessary to particularize.

In the treatment of syphilis of the central nervous system special methods are indicated. This is especially true of the parenchymatous type. Many interstitial cases will respond promptly to the ordinary methods already outlined. The spinal fluid and symptoms must be our guide. Blood Wassermanns are utterly unreliable.

I have discussed this subject fully in other communications, and cannot do more here than express the opinion based on a considerable experience, and a careful study of all available data, that intraspinal medication either with the salvarsanized serum, mercurialized serum, or some other of the more direct methods, is helpful in all and in some essential to substantial results.

I have had most experience with the Swift-Ellis technic, the only important modification being the withdrawal of the blood in twenty minutes after the intravenous injections, while salvarsan can still be demonstrated in the serum,

instead of waiting an hour when it frequently cannot.

Even if time permitted, it probably would not be appropriate to take the time of this audience made up mostly of general practitioners, in a detailed discussion of this somewhat technical subject. I will only add that by these methods I have seen brilliant results in the treatment of a large variety of cases of cerebrospinal syphilis. Tabetics have almost constantly undergone improvement, in some cases amounting to a relative recovery. They have generally failed in general paresis, although exceptional cases have convinced me that a probable cure or at least an indefinite arrest can be expected if treatment is begun sufficiently early. Both tabes and general paresis can and should be prevented by routine examinations of spinal fluid and blood in all syphilitics with the slightest disturbance of the nervous system, and the institution of suitable treatment. These diseases which are wrecking homes and filling our asylums are probably preceded for long periods of time by demonstrable abnormalities of the spinal fluid, and possibly, though this cannot be depended upon, in the blood as well.

In view of all these facts which of necessity have been treated all too cursorily, and of many others which could not even be referred to, it will be seen how important it is, in nearly all types of visceral disease to consider the possibility of lues as an etiological factor. What might be called potential visceral syphilis probably exists in practically all cases of syphilis. What I mean is that there is probably spirochetal infection of the blood and lymph streams of every organ, and I may add, tissue, of the body. We need a broader, fuller, clearer concept of what syphilis really is. Its closest congener perhaps is tuberculosis, whose germs, like those of syphilis, may be found anywhere—almost everywhere. In syphilitic rabbits the liver and spleen were found by Uhlenhuth and Mulzer the most infectious of internal organs. They have demonstrated by inoculation into the testes of rabbits, that spirochaetes exist in the spermatic fluid, in the milk of a symptomless mother of a congenitally luetic child, in the spinal fluid and blood, especially of recent cases, and in the tissues excised from the eruptive spots of the secondary stage. They were unsuccessful in the blood and spinal fluid of tabetics. I think that this really could be reasonably anticipated. We would expect to find the widest distribution of the germs in the secondary stage with fever and other constitutional disturbances. Something analogous is seen in the history of typhoid fever with its primary sores in the intestinal lymphatic glands, its wide-

spread secondary infection during which the Eberth bacillus can be found in the excised tissues of the roseolus eruptions, in the blood, and urine, etc., by culture methods, and later, months or years afterward, playing a pathogenic rôle in the bones, gallbladder, etc. Under these latter conditions we would not expect to find the typhoid organisms in the blood or other body fluids, nor should we expect to find the spirochaetes there in tabes or paresis, although during active exacerbation it is possible that they may be.

In conclusion, I wish to appeal to every medical man, whatever his special field of work may be, to study afresh and constantly the problems of this widespread disease. It is one of the *bête noires* of the clinical and sociologic world, which may enter any home or any life, however pure and innocent, and work unspeakable tragedies. It is indeed a foeman worthy of any man's steel.

DISCUSSION

DR. A. W. BRAYTON (Indianapolis): Mr. Chairman and Members: I feel very timid in discussing syphilis after Dr. McCaskey has essentially considered all the phases of it, for while his subject is visceral syphilis, he has included all aspects of syphilis. Every tissue is "visceral" that is inside of the skin or the mucous membrane. Therefore, the whole subject of syphilis is now open for discussion from the multiple viewpoints laid down by the essayist.

I fancy when Dr. McCaskey decides to write a paper his mind grasps everything pertaining to it. As in Matthew Arnold's portrayal of Goethe as the world's great critic and physician:

He took the suffering human race,
He read each wound, each weakness clear;
He struck his finger on the place
And said, "Thou aildest here, and here."

And in this essay the author has certainly touched on every phase of this great disease, so that any discussant is at liberty to say what he pleases within the time limit.

I prefer to limit myself to the prevention of syphilis, and wish to say also that I do not regard syphilis as the most horrible and devastating disease that has affected the human race. Syphilis is wonderfully amenable to treatment and cure. If I were to consider one of my own friends or family as to whether I would rather they had the initial lesion of syphilis or an attack of typhoid fever, I would be at a loss to say which I should prefer. Typhoid fever is a dangerous disease, one in every seven or eight dies; but now it is absolutely and easily preventable by vaccination. Any citizen can now decide whether his family may die of typhoid or not; but not so with syphilis. In suspected syphilis the essentials are early diagnosis and persistent and efficient treatment until the dis-

ease is cured, or at least controlled so as to secure safety to the patient, his progeny and the community.

The essayist has indicated the lines of diagnosis. We know them—the early clinical symptoms, the presence of spirochaetes in the initial lesion, particularly the venereal history—and all these considered in connection with refinements of the Wassermann. It is sufficient for my present purpose to say there are only two drugs that destroy the syphilitic organism. These drugs are mercury and its various salts, and the arsenical compounds introduced by Ehrlich. We have been using in our city clinics and private practice the arsenobenzol made by Dr. Frank J. Schamberg of Philadelphia, and also the diarsenol made in Toronto. Dr. Schamberg is no longer making the drug, so we are now restricted to the preparations made in Germany and Toronto. Either of these meets all the indications of practice. In my clinic at Indianapolis we have given to the charity patients over \$6,000 worth of the Ehrlich arsenical preparations, salvarsan and neosalvarsan for syphilis.

It is easily given. We use a 10 to 20 c.c. syringe. We aim to give three or four doses of salvarsan a week apart. The apparatus is not expensive. The syringe costs about \$1.50, and if one will follow the directions in the package he will meet with no trouble. In our clinic—city and college—we have given several thousand doses. We have never cut down on a vein; we have never forced the drug into the tissues so as to impair the use of the arm for an hour. The injections are given by the heads of the clinics and their assistants. The junior and senior classes are perfectly familiar with the procedure. Dr. Schamberg told me that the results of our procedure and teaching had made the sale of arsenobenzol in Indianapolis and Indiana greater than that in Philadelphia and Pennsylvania. We frequently give the mother a part of a dose and divide the rest among the children according to their age, weight and necessities.

As to salicylate of mercury, I wish to say that in my judgment if I had to use but one mercurial salt, I would use the salicylate of mercury in the proportion of one dram to an ounce of albolene, giving one grain to one and one-half every five to ten days. You cannot by any possible means use more than ten cents' worth in a year. Any physician who spends more than that is wasting his money. In my consultation work I frequently hand out an ounce of the salicylate preparation to a physician for his patient, telling him that it cost me but ten cents and would be enough for any stage or case of syphilis for a year. But the patient must come to the doctor thirty-six times a year for two years, and then, if his case is taken early before the systemic infection occurs, and he is under that doctor's frequent observation, he is cured.

Our luetic patients come in, receive 10 to 15

minims of salicylate of mercury in the buttocks once each week. Salicylate of mercury is highly antiseptic, and we use no extreme precautions whatever to prevent an abscess. I offer \$5 to any student in my clinic who gives an injection of salicylate of mercury and finds it followed by an abscess. We have never had an abscess from the use of salicylate in the clinic or in private practice. It is almost as antiseptic as corrosive sublimate. The patient gets nine injections, then four weeks' rest, and then takes up the treatment again. Four series in a year. Three years of such treatment is desirable. No inconvenience, no pain, nobody knows it. And right here I would like to mention that this is the great treatment in Europe. Wechselmann in Bremen; Fordyce in the Vanderbilt clinic; Dr. Keyes, the elder, who introduced the injection of salicylate in New York clinics, are sticking to it. I am not fanatical as to my insistence on the salicylate of mercury by injection; there are other ways of treating syphilis; but I do like a method that is clean and decent and puts the medicine where the patient cannot get away from it, brings the patient to you frequently, and brings the country doctor a suitable return for his work.

After a reasonable time you can try the Wassermann. I sometimes feel that we have not gotten so much out of the Wassermann as the laity and the general profession expected. It has its faults; it is only a symptom. It is worth while to consider everything that *may be* good, but particularly is it important to hold fast to the things that *are* good. We need a propaganda for the prevention and cure of syphilis, including every physician in the country, and I would like especially to mention this book of Pusey of Chicago which I hold in my hand. It costs 25c., it is printed by the American Medical Association as a part of their work on the treating and prevention of disease, and is the best general treatise I know. Every doctor that comes to me with a patient goes away with that book in his hand, and with the expressed desire on my part that he will select something from each of its twelve chapters, and prepare a paper to be read before his local society. It is a perfectly proper book to hand to any intelligent patient, publicist or teacher interested in syphilis. I would have been proud to write this book. It is a model of simplicity. Dr. Garshwiler of Indianapolis uses it as an outline to the twelve lectures he gives in the Indiana University School of Medicine on syphilis.

In the treatment of syphilis I speak as a consultant who has treated nearly one hundred physicians in the last thirty-five years. I have had three students out of a class of sixty in the old Indiana Medical College with chancres on the finger of the right hand, and all are cured and doing well under the old treatment of protoiodide of mercury by the mouth. But had I known as much as I do now about how to iden-

tify syphilis, and had we had salvarsan, I could have cured them in three months.

We must diagnose our cases carefully, stick to them, paying attention to the fundamental principles laid down in our text-books, always throwing the balance to the fact that it may be syphilis. When you are in doubt, there are plenty to help you. But you must keep the patients at it; keep them under observation. The reason they are not cured is because they do not take the medicine you prescribe the first three or four years. Syphilis, like tuberculosis, may be dormant for over fifty years, and then break out in various forms, such as affection of the cord and brain syphilis or disease of the heart and arteries. I have never known a case of syphilis diagnosed and treated early and efficiently three or four years, to have tabes, ataxia, optic atrophy, or brain syphilis.

DR. CHARLES P. EMERSON (Indianapolis): It is indeed a pleasure to discuss a practical paper so scientifically presented as that of Dr. McCaskey. And I also wish to express the gratitude that Indiana University owes to Dr. Brayton, who for years has been insistent that medical students should know syphilis, its diagnosis and treatment, and know it well. He has for five years followed up the Dean, insisting that there shall be sufficient hours given to teach this subject, and if the teacher appointed to this work shirks a little, Dr. Brayton takes him to task at once. Indiana University School of Medicine owes much to Dr. Brayton and I am glad at this time to express our gratitude.

I am heartily in accord with what has been said, but would like to lay stress on certain points. First, the value of the Wassermann test. One of our foremost pathologists recently said that in ten years we would hear nothing of the Wassermann test. It has been much misused. When 100 per cent. positive it certainly is of value, but it surely is a great mistake to encourage the patient with a negative Wassermann by telling him "You need not be afraid, there's nothing in the blood." If the Wassermann is not quite positive or is negative, we are in the same position as though the test had not been made.

Again, as Dr. McCaskey has well said, the cases which show a positive Wassermann are not necessarily at the time the test is made, suffering from syphilis. It is very hard to teach our students to observe this. A patient comes into the dispensary with sore eyes, "Take a Wassermann," they say. It is 100 per cent. positive, "Treat him for syphilis." A man comes in with sore throat and hoarseness—a Wassermann is taken, proves 100 per cent. positive, they treat him for syphilis. He comes in with a peculiar walk, Wassermann is 100 per cent. positive, they therefore treat him for syphilis. A patient is run over by a trolley car; the Wassermann is 100 per cent. positive, why not treat him for lues? The point is this: The

fact that the patient's blood gives a 100 per cent. Wassermann test is no more evidence that the symptoms he is then complaining of are due to syphilis than the discovery of a few crescents in the blood of a man down South means that he then is suffering from malaria. The 100 per cent. Wassermann shows the possibility that a formerly contracted lues may today be active, but does not prove it. Careful clinical examinations are as important now as formerly to determine the patient's condition.

The next point is one that Dr. Brayton has emphasized, that is that salvarsan plays only a small part in our treatment of syphilis. I was present a few years ago when one of the first doses of salvarsan was given in this country. It was administered with almost the formality of a religious ceremony—surgical gowns, an immense amount of preparation, etc. The man who gave the dose held the syringe in his hand and said: "What a wonderful drug! One dose cures the patient for life!" A few months later I am told he was advising two doses, then we were giving six, and now we half admit that the great value of salvarsan is to make the patient "safe" while he is being cured by mercury.

The next point to emphasize is that the earlier we make our diagnosis of syphilis and begin with the treatment, the less damage will be done to the patient's body. Dr. McCaskey has emphasized this very emphatically. This is especially true of syphilis of the central nervous system and of the arterial system. We recognize the importance of lues in the production of aortic insufficiency, aortitis, nephritis, etc. The sooner the infection is under control in these cases the less permanent the injury. We must also measure the influence of the focal infections, typhoid fever and other infections.

DR. HENRY A. CHRISTIAN (Boston, Mass.): Mr. Chairman and Members of the Association: The Wassermann test, as we carry it out now, has both increased and decreased our diagnostic difficulties. The last three years we have made it a practice to have a Wassermann test of every patient admitted to the hospital under medical service. By doing that we have received great assistance because we have recognized I am sure in a considerable number of patients the effects of syphilis—late syphilis, which probably we would not have recognized if we had not performed the Wassermann reaction, because there was nothing else in the case prior to our securing a positive Wassermann reaction that would indicate that the patient had syphilis. These lesions were of the type not previously recognized as syphilitic. There was no positive history obtained in the routine taking of the history nor subsequently in inspecting the patient could you obtain anything that would suggest that there was previous syphilitic disease. In that sense a vast amount of assistance has come to us in our diagnosis.

On the other hand a great amount of difficulty has been added. Dr. McCaskey has referred to that. The fact that the Wassermann reaction is positive, brings about the necessity of deciding whether that has anything to do with the patient's present condition. Sometimes it does, and sometimes it does not. I know of nothing that requires keener diagnostic skill than that decision. It means weighing every bit of evidence obtainable from the study of that patient and from the study of that patient's history, and not infrequently it means more therapeutical testing before you can come to that decision—it means dependence only upon all other possible tests.

What Dr. Emerson has said about the Wassermann reaction leading to diagnostic carelessness is perfectly true, but there is no excuse in anything for carelessness. Carelessness is carelessness, and if the Wassermann reaction leads to carelessness it is not the fault of the Wassermann reaction; it is the fault of the clinician. Tubercle bacilli and a dozen other things lead to that sort of carelessness, providing you will be led. In that sense the Wassermann reaction has increased our diagnostic difficulties. When you weigh the two sides against each other I believe the aid we have received in decreasing our diagnostic difficulties outweighs the other side, provided you are not a careless man. I know this—I have cured (in the sense that one of the discussers of the paper has used the word) patients by reason of the fact that the Wassermann reaction was positive, which led us into the question of syphilis, and we found the patient was syphilitic. He is practically well today as a result, and that is worth while. If we had not had the positive Wassermann reaction I am quite sure that we would have overlooked some of these cases and given them incorrect treatment. Consequently it seems to me that the Wassermann reaction should be a routine diagnostic measure in all cases of diagnostic difficulty presented to the internist. It is not necessary of course in those cases where there is a cutaneous lesion easily recognized as syphilitic. It may help, but it is not necessary. It is necessary in my judgment in all cases in which there are diagnostic difficulties.

DR. F. W. CREGOR (Indianapolis): I am very glad to hear this discussion of the Wassermann reaction, and to express my appreciation of the splendid paper which Dr. McCaskey has offered us. I can especially emphasize the force with which Dr. Brayton has driven home the necessity for intravenous treatment in handling syphilis, and also the statements of the speakers who have preceded me. If we will look upon the Wassermann as an aid to diagnosis and not a guide to diagnosis, I think we will place it in the proper light. The pendulum is swinging to that point and the profession is accepting the Wassermann as a guide to diagnosis, and this is proper, I think.

I like to look at syphilis as a tissue disease, and we must remember that when the patient has reached that stage of his eruption about nine or twelve weeks after exposure, or about nine weeks after the appearance of the first sore, that is the time in the history of the disease that his future history is written. At that time the infection is thrown by the blood stream over the entire body and it becomes a tissue disease from that time forward.

Dr. McCaskey has spoken of latent syphilis, and I like to think of syphilis as being latent after the first year. He has also spoken of salvarsan and neosalvarsan in the treatment of latent syphilis. I think we derive much more benefit from the use of salvarsan if we, in all cases that will permit, use the mixed treatment of iodids prior to the administration of salvarsan, in latent syphilis, not early syphilis. As to the dosage, there is no contraindication for salvarsan at any stage.

Unquestionably we find more evidence of visceral syphilis in women than in men, especially about the pelvis and lower bowel. This we may account for possibly by the fact that syphilis is more prone to manifest itself at points of irritation, and as women suffer more from constipation and the consequent irritation, we can understand why we find more evidences of this type of syphilis in women than in men.

DR. ALBERT A. STERNE (Indianapolis): I want to emphasize a few points of the paper and some that the discussants have referred to. First, that we should regard the laboratory findings wholly as symptoms which may or may not be present, just as any other set of symptoms may or may not be present in a concrete case. The fact that a symptom is absent does not exclude a disease, whether we are speaking of syphilis or any other disease, so long as other symptoms speak for the presence of that disease. So it is with laboratory findings, and the Wassermann test in particular. Its absence does not necessarily mean that there is no syphilis; its presence means that there is a syphilitic infection in this individual, but that it may not be active, and other symptoms must be taken in consideration with it.

We frequently find individuals complaining of symptoms simulating cancer of the stomach, cancer which has been cured, and these cases are syphilitic ninety-nine times out of a hundred. And that is equally true in cases which even have been operated on and in those which have been pronounced inoperable, cases where the lesions are exposed to the naked eye, and which have suddenly recovered under anti-syphilitic treatment. Even microscopically, cancer of the stomach cannot be differentiated in certain cases from the gross lesions of syphilis of the stomach.

I want to emphasize particularly the fact that the central nervous system is invaded early in the course of syphilis. It is a very great mis-

take to neglect the routine serological examination in any case of known syphilis early. It is very unwise to wait until symptoms of lesions of the central nervous system have been definitely shown. As a rule, it is then too late to gain any advantage from the test. When the patient has headaches early in the disease it means that the central nervous system has been invaded, whether that headache occurs in the secondary period or not, for the secondary period is exactly analogous to the exanthemata of any acute infection except that there has been a longer period of incubation. The headaches of the syphilitic are exactly analogous to the headaches of other infectious diseases. Therefore I should say that in every case the spinal fluid should be carefully examined early, within a month or two of the known infection, and if then there is a positive Wassermann of the spinal fluid that is the time when the intraspinal treatment should be given, and not several years later, because that is the time for prevention of syphilis of the central nervous system. It is rather too late to expect to have definite improvement when the patient shows unmistakable signs of tabes and paresis. No man living can determine how far in any given case the symptoms presented may be purely inflammatory and not degenerative, and therefore the patient must be given the benefit of the doubt and in all cases in which the symptom complex indicates an infection of the central nervous system our treatment should be the routine investigation, not only intraspinal, but constitutional still later.

The question has been asked, "What are the results today as compared with those of years ago? Are our results better than fifty years ago, in the treatment of this infection?" We cannot say very much. We can recall hundreds of cases of cured syphilis, not only of the central nervous system, but of the body. Syphilis of the central nervous system is inevitably connected with visceral syphilis. The pathology of paresis is syphilitic throughout the system, not alone syphilis of the central nervous system. With our old methods our results were almost as good as today. After several years of careful investigation and treatment and careful following up of cases we cannot say that we can register a single cure in instances of syphilis of the central nervous system by our newer methods of treatment. I believe we delay the results, but we cannot say that we find a single cure. We have not cured a single case of so-called tabo-paresis. We have delayed in many instances the rapid break-down, but not in a single instance has a positive cure been established. In tabes likewise.

DR. C. F. NEU (Indianapolis): I would like to ask the essayist if he has made any regular examination of the spinal fluid in cases of syphilitic infection during what we might call the secondary stage? I would also like to ask if he

has found it possible in his treatment of nervous syphilis to convert a positive reaction of the spinal fluid into a negative by treatment other than intraspinal methods?

While I am on my feet I also wish to emphasize a few points that he referred to. One is the importance of always being on the lookout for a possible syphilis in diseases of the nervous system. Those of us who are dealing with this phase of disease are constantly meeting with patients who have been subjected to a series of treatments or operations only to learn later that it is a syphilitic disease of the nervous system. It is not strange that the nervous system is so frequently involved. One would think from the later discussion of this paper that syphilis deals entirely with the nervous system. It does not. It is always associated with a general systemic infection. The fact that the nervous system embryologically is developed from the blastodermic membrane to the cutaneous, and the cutaneous system is the seat of the primary inoculation in practically all cases, probably accounts for the frequency with which the nervous system is involved, and it also may account for the probability that potentially every case of syphilis becomes a possible case of cerebrospinal syphilis.

In regard to the Wassermann, I also wish to emphasize its significance. We must take it into consideration in the diagnosis of nervous diseases. A great many diseases are so easily recognizable that the Wassermann is not necessary, but one should frequently be made when conditions are such that it requires every factor we can utilize in making our examination and diagnosis. In conditions of that kind the Wassermann is a factor that we have to take into consideration the same as all other data we can find. It is just one of the factors we must utilize in making our examinations.

DR. GEORGE W. McCASKEY (closing): I do not think I need to take up much time in answering criticisms, because there really has not been any of an adverse character. There are plenty of points to which I could refer, but that would simply be extending the scope of my paper, and this is not the proper time to do that.

Answering one or two questions: I have not made routine spinal fluid examination in cases of early syphilis. In the first place, I do not see them. I am not a syphilographer, I am an internist. I have not in recent years seen one case of primary syphilis, and hardly ever a secondary. I see the tertiary. When these patients come in with symptoms simulating syphilitic disease, I believe we should do as Dr. Sterne suggested, make a spinal fluid examination early. I believe there is some literature on that point to show that we do find in the spinal fluid evidence of very early involvement of the central nervous system.

As to converting a positive Wassermann find-

ing into a negative by general treatment, I have not done that because in most of my cases when I have involvement of the central nervous system as evidenced by the symptoms and spinal fluid findings, I have practically always used the intraspinal treatment. Occasionally a patient is rather too nervous to use the intraspinal treatment, and in some of these cases I have gotten very good results by intensive general treatment.

I cannot help feeling that Dr. Brayton, eminent as he is as a syphilographer, is just a trifle too optimistic in regard to the cure of syphilis. I think he meant a cure of the symptoms, and I have no doubt that in a large proportion of cases his suggestion of three or four salvarsan injections followed by mercury may be sufficient, but I have given as many as fifteen intraspinal salvarsan and neosalvarsan injections, with intravenous constantly, and still had a positive Wassermann and other evidence of disease of the central nervous system, and therefore I am a little skeptical about curing patients in two years. The point is here—I do not believe it is safe to say to any syphilitic, "You go ahead with this kind of treatment for two years, then you will be safe." I doubt very much the wisdom of this. We can cure the cases clinically, but I do not know whether we can pathologically. The point I wish to make is that patients should be given to understand that they need to be under observation, not for two years, but for an indefinitely long period of time thereafter. If a blood Wassermann is made, if occasional spinal fluid examinations are made, then the symptoms can be controlled and we will and do practically prevent, which is what I think Dr. Brayton means by "cure." But in my judgment the patient should be kept under careful observation for a long time and receive occasional treatments in order to overcome whatever conditions may arise.

I cannot quite agree with Dr. Sterne that our results are not any better now than ten or fifteen years ago. I have seen tabetics—Dr. Sterne has, too—in which practically all symptoms disappeared. Of course, when the nerve structures have been destroyed and degenerated we cannot reproduce them, but we can reeducate other elements of the nervous system to do the work of the destroyed elements up to a certain limit, and therefore I believe that we are getting results now that would have been impossible fifteen or twenty years ago. I have seen these cases go practically free of symptoms, outside of the tabetic gait. I have seen the luetic reactions in the spinal fluid disappear, and later return; and to my surprise I have found foci which I could not successfully destroy by treatment. Therefore I think these patients should be under careful observation for a long period of time. But we did not get these results before.

TUBERCULOSIS PLUS *

ALFRED HENRY, M.D.
INDIANAPOLIS

Tuberculosis is seldom if ever a pure and isolated infection. As such it would destroy very few lives and would require a long time to do it. What is known as a *cold abscess* is perhaps an example of an unmixed tuberculous infection. It does very little harm and is very slow in doing that. In so far as other organisms are concerned, it is a sterile condition. Tuberculous glands of any kind anywhere in the body may exist for a long time and give practically no trouble. It is not unusual to see this condition cover a period of years. Pulmonary tuberculosis has been known to exist for several years without producing any of the definite symptoms by which we now make a correct diagnosis. The spinal column is a field in which tuberculous infection may be active for years before the kyphosis becomes very noticeable unless other organisms creep in. Tuberculous dermatitis is not so horrible if the infection is not aided by other destroying organisms. In this same relation we might mention tuberculous osteitis, tuberculous peritonitis and many other tuberculous itises. This is tuberculosis. It appears that the profession looks upon and considers only the tuberculosis aspect of the great field of *tuberculosis*.

Add pus-producing organisms to pure tuberculosis infection and trouble begins. Glands break down, lung tissue is soon occupied by cavities, and meningitis brings on high temperature. Then, hip joint disease can be diagnosed by symptoms, osteitis manifests degeneration, and skin and conjunctiva conditions show ulceration. The introduction of pus-producing organisms allows Koch's bacillus to be demonstrated in discharges from the epididymis, testicle, and kidney. This is tuberculosis plus.

Again let us say tuberculosis works very slowly while tuberculosis plus gets in its work rapidly. The latter produces the alarming symptoms which call for our best efforts in the combat. Treating tuberculosis is not enough. The plus must have scientific attention. We believe tuberculin properly administered is an important factor in curing tuberculosis, but affects the pus-producing phase little or none, neither does it lessen an elevated temperature. It is not a factor in curing the plus. Rest is one of the principal crutches upon which a tuberculous patient must lean in order to recover, but rest will

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

not cure an abscess. Sunshine is in line for proper treatment, it is thought, but it will not affect much change in the plus. Good habits are conducive to shorter duration in the tenure of a tuberculosis siege, but a proper life might aid the plus very little in restoring health. So let us see to it that we give more of our attention to the plus conditions that foster and further zones of tuberculous infection.

Under the general heading, "Tuberculosis Plus," secondary tuberculous infection may be considered. In most instances we believe the primary focus is the least harmful. For instance, a tuberculous cervical adenitis seldom ends disastrously so long as it remains a primary lesion; the same may be said of a primary pulmonary focus. But let a secondary infection develop and a hard fought battle is very necessary to save life. If it is possible to prevent secondary infections the profession should make every effort to do so. Surgeons do otomies and ectomies on many a patient who has a known or unknown primary tuberculous lesion under ether anesthesia and produce a full blown plus in the form of a secondary infection. We know of several cases of cervical tuberculous adenitis operated on for removal of glands under ether, followed by pulmonary tuberculosis. Two of such cases recovered, but the others died. All of them should have recovered but for this plus mentioned above and for which the surgeons were responsible. A case of an ischio-rectal abscess with a pulmonary tuberculosis becoming arrested was operated under ether and died in three months with phthisis pulmonalis. Another case of mastoiditis with no known pulmonary trouble was operated under ether anesthesia, which, after three months presented a well-developed case of old fashioned consumption. Recovery doubtful. Numerous similar cases could be cited. In the cervical adenitis cases, the glands should have been let alone. Tuberculin and hygienic measures are curing these cases if followed to the letter. We believe the removal of tuberculous glands is often responsible for secondary pulmonary infection through the lymph channels and blood stream. There is no doubt about it. The danger is probably lessened if no pathological tissue be cut in the operation. In addition to a possible secondary involvement in one or both lungs, a mixed infection often occurs in the gland region which is sometimes a serious plus. In the case of the ischio-rectal abscess, the slogan should have been "no ether or no operation." In the mastoiditis case, the surgeon should have known to a certainty, at least as

certainly as one can know by a very careful examination, there was no pulmonary lesion before administering ether.

Everyone knows that any cutting operation allows an avenue for mixed infection. Cutting into a hip joint in order to give a local iodine or some other drug treatment is creating a chance for harm. After this is done then what?

Well, as a rule, the proper therapeutic measures must be resorted to, the same as should have been before the cutting, viz., rest, fresh air and maybe tuberculin. Instruments for rib resecting and aspirating trocars are becoming rusty and dusty. Why? Because the profession is learning that every pleurisy with effusion should not be tackled by the above mentioned instruments of torture. Letting well enough alone is a good thing to practice in most pleurisies. Chronic pleurisy and frequent attacks of acute pleurisy should be looked upon with suspicion. They are usually tuberculous. If not, they can be made so by such operations as rib resection and aspirating. Most effusions accompanying pleurisy are harmless and are Nature's own cure by the hydrothorax route. Treat the tuberculosis without producing a plus to give additional worry.

Surgeons do bring about many avoidable pluses in relation to tuberculosis. If they must operate, a local anesthetic should be used whenever possible, but when a general anesthetic is absolutely required, gas is the only logical one. No patient of mine with any form of tuberculosis shall ever get ether. It is doubtful whether there is any avoidable agency that produces more fired-up conditions in tuberculosis than ether. It is responsible for a catarrhal condition, and accompanied by a lost resistance, invites tuberculous infection already, perhaps, existing in the body.

There are many other forms of plus among which might be named intestinal canal disturbance and homesickness.

It is doubtful whether any one present ever saw a case of tuberculosis with any degree of advancement that did not present some gastrointestinal disturbance. Any wasting disease attacks early this part of the body and more especially does tuberculosis. Impaired appetite and impaired gastric and intestinal digestion occur, respectively, in order.

Forced feeding has been handed down from our remotest forefathers. We know now that forced feeding is absolutely wrong. We have quit the practice of administering bitter tonics to restore a lost appetite, because we know that extra food cannot be digested. Dr. Ethan Gray

of Chicago has proved this by a careful examination of the feces of one thousand patients. Bitter tonics might increase the desire for more food, but do not increase the digestive ferments; consequently, undigested food must necessarily be the result. Absolute rest in bed and a reduction of food, particularly the kind showing the least digestion, are the most direct remedial agents. Put a tuberculous patient with a loss of appetite to bed and the appetite will return. If any one doubts this let him try it. This very rest brings about an increase of the digestive ferments which call for more food. One does not think of crowding a patient's diet to remedy a gastritis or enteritis, yet forced feeding in tuberculosis is often resorted to when these conditions are present. If not present, they soon will be with continued forced feeding. Treat this plus or your patient cannot recover.

I shall venture to say no tuberculous patient ever recovered who was homesick. It is one of the pluses often forced by members of our profession. Sending these unfortunates to the far west is in most cases wrong and unjustifiable. The writer examined a young man two years ago whose family physician urged him to "sell out" and go to New Mexico. He was a far advanced case, incurable, and had a wife and baby. His total assets after "selling out" would have been less than \$300. Can you imagine such a family going to the far southwest with \$300? Can you imagine an Indiana doctor making such a recommendation? Homesickness and financial worries together with his disease would have caused his death within two months. Remaining at home allowed him to live four months in addition and gave the widow and her son a few more dollars with which to combat life's struggles. Let us send patients away who can go and remain long enough to be cured, if curable, or remain long enough to die if incurable, without any worries regarding finance. Let us not send a patient away alone to a new community where no one cares for him except to get his money, where there is every inducement to become lonesome and homesick. Peace of mind is as essential as rest of body in the care of tuberculosis.

In addition to the mixed infection, the secondary infection, gastro-intestinal disturbances and nostalgia, the following pluses have been observed in studying more than two thousand cases in the Indianapolis Free Tuberculosis Clinic: diabetes mellitis, syphilis, alcoholism, degeneracy, epilepsy, tapeworm and general nervousness.

The best work in this field calls for a longer

sight than one which sees only tuberculosis. The plus must be recognized and properly treated, and avoided when avoidable. The stamp of the Great White Plague will then be on fewer death certificates.

DISCUSSION

DR. S. B. SIMMS (Frankfort): I believe I voice the sentiment of this assembly when I say that this paper is altogether excellent. It deals with a very prominent feature of a most important subject. We are all aware of the iniquity of tuberculosis, and while there has been some sense of fear, it has not done much good until the discovery by Koch of the real cause. Since that time we have made wonderful progress. There have been a lot of valuable facts obtained, among the most notable of which is that forming the subject of Dr. Henry's paper—the plus quantity. In the face of so many discovered facts, however, and so much progress, the rate of mortality is about as high as it ever was, but I believe that we will soon make a much more wonderful showing.

I do not know when the idea of the plus quantity was first suggested, but I do know it came to my knowledge a comparatively short time ago in a forcible manner. I have a young lady who has recently developed tuberculosis, as proven by the laboratory and physical findings, and I sent in some sputum to have some autogenous vaccine made, with the request to make a full analysis. Along came the vaccine—*streptostaphylococcic*—with a report stating there was no tuberculosis in that sputum. I was surprised, but I continued to give the treatment and the young lady made wonderfully rapid improvement. The plus quantity had been largely if not entirely eliminated, and what tuberculous process there was left is being well handled by her normal resistance. I cannot say she is well, but clinically she is well.

I knew of another case, a young lady who was losing ground rapidly—tuberculosis of the pulmonary type. She had all the classical symptoms. She was sent to Colorado and improved rapidly. Her former weight was regained, the cough was gone. And then she began to worry on account of the expense caused to her family, and in spite of the physician she came home. Well, she improved for a while after she came home, and then after the joys of the homecoming had subsided she began to lose weight. That was two years ago and she is still with us, and her disease seems rather stationary, but a sight diagnosis could be readily made.

I was impressed with a remark made by Dr. Bloodgood last night. He said: "Information is a cure for cancer." I think that might be applied to tuberculosis—we can say that ignorance on the part of the patient of early symp-

toms may be considered a plus quantity, and if people generally were informed and educated along the line of recognizing early symptoms of tuberculosis so that they would go to competent physicians, a great many cases might be prevented or cured.

I do not know that there is any reliable means of immunizing the non-tuberculous against the disease. There may be a mild case which will run along for years, in the absence of a plus quantity, and the person hardly be aware of it. It is said on pretty good authority that from 75 to 90 per cent. of us have tuberculosis in one form or another. The majority, of course, are very mild and the subjects not aware of it. I believe it is stated that physicians, nurses and attendants in tuberculosis institutions and those who frequently come in contact with the disease very seldom develop an active form. They are probably of the class that keep the plus quantity eliminated, while a great majority of them have it in latent form.

To cure tuberculosis we must be able to recognize it before we can prove it by physical findings or laboratory tests. There is a so-called pre-tubercular state for the recognition of which we must rely largely on symptoms and history. We may not be able to find anything clinically, and we may not be able to get secretions from which the laboratory man can make his determinations. But if we get hold of these cases early and the people generally understand the importance of going to the doctor and learning what the early symptoms of tuberculosis are, I am satisfied we will make wonderful progress, and I believe that the system unhampered by other foes is capable of handling tuberculosis pretty well, so I think the most important influence in the treatment of tuberculosis is to get rid of the plus quantity.

DR. E. L. MCCOY (Columbus): I especially want to commend the paper for two points. One is the condemnation of ether, and the other is the conservative treatment of tuberculous glands. Two years ago at Lafayette I sounded a note of warning as to the use of ether in an operation for tuberculous peritonitis. In all cases of suspected latency, ether should not be used. I remember a case of a young lady who was under my care for two years, whose mother and brother had died of tuberculosis, but under careful treatment she seemed to have completely recovered from the first infection. She then began suffering from dysmenorrhea. She went to another physician who decided that curetment must be done—of course, under anesthetic. I warned her against this, but the operation was done under ether, and in six months she was in her grave. I have no doubt but that if the operation had been abandoned that girl would be living today. I care not what the disease is for which you are operating, if you have a suspicion

of tuberculosis, make your suspicion true one way or another before you select your anesthetic.

In regard to tuberculous glands, I have seen in my own experience the good results of letting them alone. A child born of a mother who dies of tuberculosis will very often have large glands. A number of cases I remember where I cautioned them to let the glands alone, and the lesion subsided in time and left them as free as if they had acquired an immunity by the action of the tuberculous process of the lymphatic glands.

The doctor mentioned pleurisy, and with that I cannot agree. I received a letter from Dr. Baldwin of San Francisco about a patient of mine sent there because she had an attack of pleurisy with effusion. This effusion was so great that it pushed the heart to the right side of the chest, and the heart action was so increased that she was in danger of suffocation. I think the rule is to let pleurisy alone and it will let the patient alone, but if it interferes with the heart you must get relief. In this case Dr. Trudeau, Jr., complimented me on the way I handled the case and yet escaped asphyxiation.

DR. GEO. W. McCASKEY: I have listened with much interest to the paper of Dr. Henry, and think we owe him a debt of gratitude for emphasizing the plus quantity in tuberculosis. I think we have all recognized for generations that it is these plus quantities that usually kill our patients, and I think it may be said without reservation that the one plus factor which we most dread and which kills most of our patients is the secondary infection to which the doctor has called our attention. It seems to me that the most important thing to consider and keep in mind is that if we can control our tubercular lesions in the first place we will not have this one big plus factor.

We may deal with these plus factors in various ways. We may use vaccines, but we cannot accomplish much by the use of vaccines where the toxins are produced in large quantities, poisoning the system so that the vaccines do not have much effect. It has been hoped that surgery may help us, and undoubtedly if we could recognize activities of this type and they could be attacked by the surgeon and drainage instituted, this would be a rational thing to apply.

Regarding the early diagnosis and treatment, this is the great problem in dealing with the tuberculous population, which is very large. But that 75 to 90 per cent. of us are tubercular is not true. We have tuberculous foci which are latent, but which with proper care and proper maintenance of health and resistance power will never cause any trouble. But when clinical manifestations come, and if we can anticipate this and demonstrate slight activity

on the part of these tuberculous foci wherever located, it will be possible perhaps by a little more careful management of the general health to raise the resistance power, it will be possible perhaps to prevent the progress of these lesions to the point where secondary infection—that plus factor which destroys most of our patients—will develop. This is not the time to take up the question of early diagnosis. I could not go over the ground at all, but I want to ask Dr. Henry his opinion, or if he has had any experience with the complement-fixation test. As I stated in my paper, for the past few months I have resorted to the complement-fixation test in every case. I have made about 150 complement-fixation tests. My interest was aroused by Dr. Craig, of *The Journal of the American Medical Association*, a year ago. I am still in doubt as to its reliability, but as a rule it has seemed fairly reliable in determining the presence of tuberculosis antibodies in the blood, and I attach some importance to it. Just how great a value it will have I cannot say.

DR. E. D. CLARK (Indianapolis): I want to compliment Dr. Henry on this paper. It is the best one I have heard since I have been here. The thing he said about tuberculous glands impressed me more than anything else—cervical adenitis. Twenty years ago when I was an intern we were doing every week a number of mutilating operations on the necks of tuberculous patients. When I started in the practice of surgery I followed that rule on a great many of them, but I have not operated on any tuberculous glands for four or five years, any more than to open an abscess and curet it. If we remove the plus factor by having the tonsils removed, then the tuberculous glands will take care of themselves by the ordinary treatment.

I heartily agree with him as to the use of ether in these cases. It is my rule to use a local anesthetic, or use gas or nitrous oxid plus a local anesthetic.

DR. PAUL JOHNSON (Sheridan): Regarding the plus factor in these cases, I was especially interested, and I recall an observation made several years ago while doing work in the hospital for the insane. We had a great many patients admitted with incipient tuberculosis, and some well advanced. An analysis of the situation to determine the plus factor was interesting. There was one factor that has not been emphasized and that I think important, and that was the separation of the husband, on the one hand, and the wife on the other, from the mate, during the active venereal life. I believe the matter of venereal excess is a plus factor of extreme importance. During the past five years I have especially observed these tuberculous cases. A young man of thirty was rather far advanced. He always suffered from hay fever, and left his family during the hay fever season and went

north, always returning apparently free of his tuberculous trouble. It suggested itself to me and I put it up to him, and being sensible he continued his abstinence after his return and found it a very decided factor in his credit balance of general health. That is a single instance, but from my hospital experience I can say that it is a very important plus factor.

DR. WILLIAM R. MOFFITT (Lafayette): If he has a case of pleural pneumonia with a chest full of pus, if he does not take out that pus how is he going to treat it?

DR. ALFRED HENRY (closing): I did not expect everybody to agree with me. So far as aspirating is concerned, of course there are cases that should be aspirated. There are cases where pus has developed and crowded in, and these cases should be taken care of, and draining is about the only way. I do not know whether a case should be rib resected or aspirated. You can leave a rubber tube in, or you can take out a piece of a rib. I do not know which is the better, and I do not know who does know. Some ribs resected effect a rapid cure, and some leave a discharging sinus for several years. I know one surgeon who refuses to resect ribs any more. I know people who leave rubber tubes in and get quick recovery in some cases, and in others have to drain for years. What are you going to do about it? You cannot say that any one method is better than the other, or is *the* method. I do say that there are too many cases of pleurisy with effusion aspirated. You go over this country, and nine doctors out of ten will aspirate when pus is diagnosed in the pleural cavity, and I will leave it to you if this is not so. And these cases are often those with a yellow fluid without a single organism in it, more especially of the tuberculosis type, and I firmly believe that aspirating these cases is dangerous and should not be done. That fluid will absorb. You can stick a hypodermic needle in and get a little fluid and put it under the microscope and tell whether there are many pus cells. I still believe that a great many of these cases which are aspirated ought to be let alone, the same as a lot of these glandular cases. I was glad to hear Dr. Clark say what he did about tuberculous glands—that he had not removed any for four or five years. I believe surgeons are getting around to that. The men who produce our literature on tuberculosis over this country say that removing glands is dangerous, and I believe they know more about this than some of our surgeons, because they study the subject and the surgeons do not.

There are many plus factors which I could name, but a ten-minute paper does not permit the naming of all these. (My subject did not permit me to discuss diagnosis.) I was to talk about plus factors and call your attention to some of these things that seem to give too much unnecessary trouble.

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EDITORIALS

LATE SYPHILIS

The idea is gaining ground that the late manifestations of syphilis should not occur. Just as it is possible to prevent the disease itself, so is it possible to prevent its late sequelae after the disease has been acquired.

Wile and Elliott in their recent communication discuss the subject in a critical study of a series of cases of late syphilis with particular reference to early treatment. They found that the length of time before the appearance of late manifestations was quite variable, ranging from four months to forty-four years; the average period they found to be ten years after infection. More than one-third of the cases in their series developed the late manifestations in the fourth year, which they consider the period when tertiary symptoms are quite likely to occur.

Perhaps the most striking conclusion of their study is the point they emphasize that in the treated cases the occurrence of late sequelae, except for isolated and exceptional cases, must be regarded as an indictment against the method of treatment used, and that intensive treatment as it is generally understood and practiced at present is protective against these late manifestations in the largest percentage of cases. When they tell us that 90 per cent. of the syphilitics whom they began to treat early and whom they treated intensively had had no signs of recurrence and that most of them are *serologically* cured, they give us information which is of the utmost significance.

Not only is early recognition of syphilis very essential, but intensive treatment must be started early and continued until the victim is cured symptomatically and *serologically*. The earlier intensive treatment is begun after the disease is acquired the better are the victim's chances for a real cure. Apparently the disease can be cured if it is attacked early and properly. Salvarsanization and thorough mercurialization in the early months is necessary. Intra-

venous treatment with some form of salvarsan, followed up by intensive mercurialization, either in the form of inunctions or intramuscular injections, must be carried out in every case. Treatment of syphilis by the ingestion of pills is worse than useless and must be vigorously condemned. The inefficiency of this method of treatment is suggested by the fact that the largest number of the cases that came to Wile with late sequelae had been treated by this method.

Thus are we being impressed more and more with the importance of early and efficient treatment of syphilis. In this respect syphilis may be compared to cancer and tuberculosis. Early diagnosis followed by early and proper treatment is of the utmost importance in attempting to bring about an early cure in each of these diseases. If the proper attention would be given to these diseases in their early stages our mortality statistics would show a tremendous decrease. In addition to that a great deal of human suffering would be prevented and enormous sums of money would be saved.

This idea the physician must bear in mind. Every physician must learn to be enough of a syphilographer to be able to recognize or at least suspect the presence of syphilis in any or all of its manifestations, and if he intends to treat the disease he must be sure that he knows how. Unless he really knows how he is apt to do much more harm than good.

PSEUDO DIPHTHERIA BACILLI

Local health officers have much trouble keeping persons who have had diphtheria isolated for a long time. They also have a great deal of trouble in getting carriers to remain isolated.

Much of this trouble comes from the published results of virulence tests, some of which seem to show that diphtheria bacilli lose their virulence after being in the same throat for some time. Other tests show that many carriers harbor avirulent diphtheria bacilli.

Later and more careful work seems to prove that virulent diphtheria bacilli never lose their virulence. Diphtheria bacilli in the throats of persons who have had diphtheria, or carriers who have been in contact with clinical cases, retain their virulence for all time.

Weaver,¹ tested the virulence of diphtheria bacilli from thirty-six clinical cases in which the bacilli persisted in the throats over long

1. Jour. Inf. Dis., Feb., 1917, Vol. 20, p. 130.

periods of time. In no case were the cultures avirulent.

He also tested the cultures obtained from fourteen carriers and found them all virulent.

Weaver's conclusions are:

1. Diphtheria bacilli from persons who had diphtheria and carriers who have been in contact with such patients are always virulent.

2. The bacilli in such cases usually remain virulent up to the time of disappearance even though a long time has elapsed.

3. Carriers should be kept in isolation until the bacilli have been gotten rid of or until the strains cultivated have been proven to be non-virulent. Cultures from the nose as well as from the throat should be made in suspected cases.

Now, how can we harmonize those different results? One of the chief difficulties is the improper classification of the bacilli found in cultures. For example the Hoffman type of pseudo diphtheria bacilli are found in the noses of a large majority of persons. Virulence tests are made with cultures containing a few Hoffman bacilli and bacilli containing polar bodies. These cultures are found to be virulent. Later the polar body bacilli disappear from the nose and throat and the Hoffman type are left. Virulence tests with these cultures show them to be avirulent.

The erroneous conclusion is drawn that diphtheria bacilli once virulent have lost their virulence.

It is evident then that the chief difficulty is that bacilli that were never diphtheria bacilli were called such, and that virulence tests in the first place were not made with pure cultures.

THE NURSE AS AN ANESTHETIST

Several medical journals are now discussing the question as to whether nurses should be permitted to give anesthetics. The Lakeside Hospital of Cleveland was an offender; and it is understood that in the Mayo Clinic a nurse gives most of the anesthetics. In Ohio the Lakeside Hospital's Training School for Nurses was not given recognition until the hospital not only stopped the practice of permitting nurses to give anesthetics but promised that it would not in the future be an offender.

Of course there are some who will say that there are two sides to the question, but in our judgment there is but one side, and that is that in routine practice nurses should not be permitted to administer anesthetics; and if it

should not be done as a routine thing, then it should not be done at all on account of the difficulty in drawing the line. Already the trained nurses, like the druggists, are too often usurping the functions of the medical men, with attending dangers to the public. This is not saying that some nurses and some druggists cannot prescribe for certain sick people about as well as some physicians do, but that is not an argument in favor of the general practice of permitting nurses and druggists to assume the functions of the doctor. Likewise there are some nurses who, through proper training and experience, have become expert anesthetists, but as a general proposition the person who gives an anesthetic should have a medical education, and, in our judgment, have in addition to that education, special training in the giving of anesthetics. There is nothing more disquieting to the surgeon than to feel that the patient upon whom he is operating is in the hands of an anesthetist with little or no experience, and in an emergency the patient would not stand the best chance in the hands of a person having no medical education.

Some of our greatest medical men are self made in the sense that their medical diplomas were obtained after but a few months of study, and subsequent study and observation did the rest. So it is that a nurse in the Mayo Clinic or the Lakeside Hospital may have a wonderful adaptability for the work of an anesthetist, and through study and application so broaden her knowledge and experience that she really would deserve to be classed along with physicians possessing a medical degree, but to "let down the bars" and say that nurses in general should be permitted to give anesthetics, or that the administration of the anesthetic by a nurse should be considered legal is taking a step that is fraught with grave danger.

We believe that the giving of an anesthetic is a specialty in itself, and that even the medical man, unless he has had training and experience under a competent instructor, is illy fitted to administer an anesthetic with anything like the degree of safety that should surround the patient. For the protection of the public, no person should be permitted to administer an anesthetic unless such a person possesses the qualifications and requirements provided by law for the practice of medicine and surgery. The responsibility of the anesthetist is second only to the surgeon himself, and to permit anyone to assume this responsibility who has not had medical training aside from instruction in the administration of anesthetics is dangerous to

life and health. Furthermore, from a legal standpoint, the administration of an anesthetic is in reality an act which is amenable to any law governing the practice of medicine. Therefore, the one administering the anesthetic should have complied with the medical laws. We have no sympathy with an interpretation of the medical law in which the anesthetic is considered as a drug the administration of which may be in the hands of a nurse under the guidance of a physician, for in the administration of the anesthetic the surgeon does not watch the administration for the purpose of noting the quantity given or its action upon the patient. In the majority of instances the surgeon's attention is called to the anesthetic only when the patient shows unfavorable symptoms as a result of its administration, and then it may be too late to save the patient from the effects of perhaps a badly administered anesthetic; and if the case gets into the courts it might be embarrassing for all concerned to bring out the fact that the anesthetic was in the hands of a person without medical training, and perhaps without special training in the administration of anesthetics.

Last, but not least, there is no reason why nurses should aspire to be "half baked" doctors, or should be encouraged by the medical profession to become such. Already we are overburdened with too many of that sort.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE committee appointments for 1917, as made by President J. H. Oliver, will be found on the second cover page of this number of THE JOURNAL.

SENATOR WORKS of California retires on March 1—not, however, on his own desire. It certainly is fortunate that California recognized

his unfitness, and it certainly is a blessing to the country that he is to be relieved of duty at Washington, for no more rabid obstructionist ever went to Congress, and no man sent to Washington has been guilty of fathering or supporting any more bills of pernicious effect. We sincerely hope that the country has seen the last of Senator Works as a law maker.

AGAIN we hear of another tragedy as a result of treatment at the hands of medical pretenders and quacks! In the office of the "Medical Specialists" at Gary, a patient—a foreigner—died suddenly and without apparent cause. Post mortem examination brought forth every evidence that the foreigner was in the best of health, and further evidence led to the belief that death was caused by severe electric shock. How long, oh, how long, is the public to be imposed upon by such frauds and incompetents!!

As a further evidence of our statement made on numerous occasions that doctors, as a class, are apathetic and indifferent to the interests of the profession as well as their individual interests, we note that the staff at the headquarters of many of the state associations have "trouble of their own," especially at the beginning of the year. *The Pennsylvania Medical Journal*, in trying to waken up the members of its Association to the payment of dues and to the lending of assistance to the Committee on Public Policy and Legislation, quotes similar editorial comment, making pleas for prompt action on the part of every member, from a number of the state journals, including Iowa, Ohio, New Jersey, etc. Why is it that medical men, all over the country, have this same failing? Will the time ever come when the medical profession, as a whole, will rise up and stand forth as a live, wide-awake, up-to-the-minute class of men? Why can't the profession of Indiana start the reform?

THE high cost of living has affected doctors like everyone else, but unfortunately many doctors do not seem to think that there is any chance of increasing their incomes by increasing the amount of their charges for services rendered. As a business man said to the Editor of THE JOURNAL, "the fact that doctors have not increased their fees shows an element of weakness in the medical profession's estimate of the value of medical and surgical services." There never was a time when the doctor's services were worth as much as they are today, and for the reason that the doctor of this day

and age gives more intelligent and effective service than has ever been given before in the history of the world, and if at this particular time, when everything is high, the doctor is unable to receive any more for his services than he obtained twenty years ago, then there is something radically wrong in our system of valuation of professional services. If the doctor at the present time is getting no more than his services are worth, then he overcharged his patients a few years ago. It is time for the average doctor to wake up to the necessity of charging and collecting fees that are in keeping with the times and the quality of services rendered.

HAVE you paid your county medical society dues? If not, you are not a member in good standing in any medical society, and you have forfeited the rights and privileges of all medical organizations. You may not think that you have lost much in losing the medical defense feature of the State Association, but if you happen to have a malpractice suit based on services rendered when you were not a member in good standing—and no doctor, no matter how good he is, can consider himself exempt from such trouble—you will regret having been so careless and indifferent as to neglect paying your dues before February 1. And then, think of the annoyance and even the expense that you create for the officers of our medical societies when you compel them to keep soliciting you for the small amount that is due from you to keep up membership that is worth more to you than anyone else! Shame on you for being such an ingrate!

ELSEWHERE in this number of THE JOURNAL appears the notice of the death of Dr. William T. Green, prominent physician of Indiana, and Senator from Noble, Steuben and LaGrange counties. His fine courtesy and nobility of character made him respected by members of his profession, his fellow statesman, and people from all walks of life with whom he came in contact. His death was caused from pneumonia, contracted as a result of foul air, lack of ventilation, and other debilitating conditions that have long existed in the Senate Chamber at Indianapolis, to which Dr. Green was subjected as he sat at his desk in the Senate. His death has brought about action on the part of the State, and a new ventilating system is to be installed as promptly as possible that similar tragedies may be averted; but, as stated by an Indiana newspaper, this fact being true, Dr. Green became a martyr to reform, and he died that others might live.

AT the beginning of the European war a great cry went up about the impoverishment of the South through a diminished demand and radical lowering of the price of cotton. "Buy a bale of cotton to help the South," was a familiar expression, and people of the North were urged to make an investment in order to save the South from bankruptcy and poverty. The outlook, which at first seemed so dark, proved to be but the beginning of such a rise in the price of cotton as the world has never seen, and the South now is reveling in the greatest prosperity ever known. We rejoice with our southern medical friends, for at one time we were led to believe that there was not a doctor south of the Mason and Dixon line that would have a shirt to his back at the end of the year unless something turned up to create a market for the principal crop of the South. Here's hoping that our southern medical friends will share in the general prosperity that has come to their section of the country!

ACCORDING to the newspapers, President Wilson has nominated as members of the workmen's compensation commission, to administer the federal Employees' Liability Act, the Reverend R. McMillan Little of Swarthmore, Pa., a preacher in the United Presbyterian Church; a Mrs. Axtell of Bellingham, Wash., a social worker and a defeated candidate for Congress; and a J. J. Keegan of Indianapolis, a member of the International Association of Machinists, formerly a member of the state legislature, and more recently a commissioner of conciliation in the Department of Labor. The first of those mentioned above is stated to be a Republican, the second a Progressive, and the third a Democrat; none is a physician. Probably 90 per cent. of the work of the commission will be medical in character.—*The Journal A. M. A.*, Jan. 27, 1917. Fine chance for a high standard of efficiency and competency. It is like employing a blacksmith and an undertaker to build a house.

WE have received a copy of the February number of the *Revista Americana de Farmacia, Medicinay Hospitales*, and among the original articles we note one by Dr. G. W. McCaskey of Fort Wayne on "Enfermedades Sifilitico-Aorticas; Caso con Electrocardiograma Anomalo Sugiriendo Asincronismo Ventricular." We also note that Dr. Victor C. Vaughan, Dean of the Medical Department of the University of Michigan, is represented by an article on "Proteinas Venenosas." Presumably these articles are original contributions, as we note no evi-

dence of credit as reproductions. The character of the publication receives a severe setback in our estimation when we note, in the advertising pages, the blatant announcements of Hostetter's Bitters, Dr. Kilmer's Swamp Root, Fig Syrup, Radway's Ready Relief, Bromidia, Danderine, Sal Hepatica, Antiphlogistine, Gas-trogen, and several other patent medicines or proprietaries of questionable value. Will the day ever come when men of the standing and reputation of Doctors Vaughan and McCaskey refuse to permit their articles to appear in periodicals which are largely supported by such objectionable advertising as mentioned? These distinguished gentlemen can just as well afford to have their productions appear in Ayer's Family Almanac or the "Stringtown Blatter."

It is becoming more and more evident to advertisers that they must avoid deception and exaggeration in advertising their wares. This has become necessary not alone because the better class of medical publications are demanding such action, but the advertisers are finding out that it pays to establish a reputation for fairness and reliability. The Victor Electric Corporation, in placing its advertising with us, has the following to say in a letter to the Editor:

"It is the policy of the Victor Electric Corporation to stand for the truth at all times in all of its advertising correspondence and sales work. If at any time, in going over our copy, you notice any statement which is at all questionable we will appreciate it if you will call our attention to it, when we will either furnish sufficient proof for the authenticity of the statement, or withdraw it. We have an honest, ethical service to render to your readers, and we ask your earnest cooperation in helping us to present it."

Likewise, the Frank S. Betz Company, recently reorganized and under new management, is very positive in its guarantee of satisfaction to every physician who has dealings with the firm. The management writes that "quality is the first consideration, and this is followed by a positive and unmistakable effort to give every customer complete satisfaction, even to the point of giving the customer the benefit of the doubt."

It should be unnecessary to remind our readers that THE JOURNAL carries only approved advertising, and refuses all advertising to which any reasonable objection can be raised. It is a well-known fact that there are many firms and many institutions not deserving of confidence, and it is strange that medical men so frequently give their patronage without inves-

tigating to determine whether or not patronage is deserved. It is common knowledge that many dealers in physicians' supplies are unreliable; that they furnish goods of inferior quality; and that they are generally unsatisfactory to deal with; yet they manage to delude a considerable number of doctors. The same is true of sanitariums and hospitals, and especially those institutions that are devoted to the treatment of drug addictions. The quack sanitariums are numerous, but they thrive because doctors either patronize or sanction patronage by their patients. THE JOURNAL has refused the advertising of a number of such institutions. It does, however, carry the advertising of several institutions that are deserving of the confidence of the medical profession, and we think that as a matter of fairness to the medical profession, to patients, and lastly, to THE JOURNAL, these institutions should be patronized.

THE present session of the Indiana State Legislature gives promise of being but little different than those that have gone before, with the possible exception that a few more momentous questions have been up for consideration. As was to have been expected, there have been the usual number of bills aimed at the medical profession, either with a view to abridging the rights and privileges of medical men or in lowering the standard of medical practice. Likewise there have been the usual number of senators and representatives who, in opposition to any sense of reason or fairness, have thrown their influence to medical bills that would prove vicious in effect if enacted into law. None of these senators or representatives have been particularly interested from the standpoint of politics, and their approval or disapproval of any bill of medical interest has been a matter of personal judgment as influenced by a misconception of the real intent of the bill under consideration. Occasionally support of a vicious bill has been purely a question of doing some one a favor, whether justified or not. Our Legislative Committee has brought a good deal of pressure to bear upon these senators and representatives, but the average legislator pays no attention to influence unless that influence carries with it the possibility of reward or punishment. The medical profession never has asked for any legislation that was not more for the benefit of the public than the medical profession, and the only reason that more and better legislation has not been secured by the medical profession is because the legislators have not been made acquainted with the

situation in all its phases, and that sufficient pressure has not been brought to bear in a way that makes the legislator understand that failure to obey the dictates of those whom he represents means political suicide. In other words, one of the most effective means by which the medical profession can accomplish something is by first uniting in an effort to elect men to represent them who are in sympathy with the aims and objects of the medical profession, and, secondly, by uniting to punish those men who are derelict in duty.

IN connection with our ever-increasing knowledge of electro-therapeutics, we desire to call attention to the fact that there is good, bad, and indifferent electrical apparatus, and with it, as with everything else that has anything to do with the treatment of humankind, doctors should be very sure to purchase only the best. In this day of graft, fraud and quackery it behooves medical men to patronize only reliable firms, and we have mentioned this fact time and again in these columns. THE JOURNAL carries only the highest grade and most approved advertising, and, with reference to electro-therapeutics, we desire to call attention to the fact that beginning with this issue of THE JOURNAL our advertising pages will carry, each month, the announcements of one of the largest and most reliable manufacturers of electrical apparatus in the world. This corporation (which in reality is a consolidation of four large concerns) has selected a list of ethical journals, your Journal among them, to the exclusion of that great bunch of medical journals which carry "almost anything," and it is up to Indiana doctors to show that they are worthy of the confidence placed in them, and that they are progressive and use only the highest class apparatus, by patronizing firms of this kind to the exclusion of unreliable firms.

NITROUS-OXID anesthesia seems to be gaining in popularity, and a number of the larger clinics are using it almost exclusively. Crile reports, in *The Journal A. M. A.* (December 16, 1916), that in his own clinics he has administered nitrous-oxid anesthesia in 15,000 cases without a death, and that he is learning constantly how better to adapt the anesthetic to the case. He considers this form of anesthesia better than ether for the bad risk, and that analgesia with local anesthesia should be employed with general anesthesia only when it is demanded by certain phases of the operation. He reports an experimental research into the nature of

nitrous-oxid and ether anesthesia, with special reference to the effects on the body; and certain relations to normal sleep, hydrogen-ion concentration, and infection. He concludes that interference with oxidation alone is an insufficient explanation of anesthesia, while the clinical examination as well as laboratory tests point to an induced acidity as the cause. It is, therefore, necessary for the surgeon and anesthetist alike to realize during the operation that each is draining the store of reserve alkalinity. The histologic lesions of inhalation anesthesia are acid lesions which are restored only during sleep. Experiments seem to show that nitrous-oxid anesthesia has a protective action, and not infrequently the brain cells show a marked repair of the changes due to fatigue, emotion, infection, etc.

VISIT YOUR HEADQUARTERS.—Many of the physicians of Indiana have been interested sufficiently in the work of their Association to visit the offices of the Executive Secretary at 308 Hume-Mansur Building, Indianapolis. However, we wish to extend a further invitation to all the members of this Association to make themselves known to us whenever they are in Indianapolis.

This is your headquarters. It is your office and we are here to be of service to you in any way possible. We want to get acquainted. We want to know your views about matters of interest to the Association. It is hardly probable that all the members of the Association can hold the same views upon important questions, but it is very important that this office knows what the members desire. Thus far, we have been concerned largely with our interests at the Legislature and this will continue to hold our attention until after the close of the session. Following that time, we shall start a publicity campaign and shall engage extensively in promotion work to increase the membership of the State Association. We desire also to cooperate with all the physicians in matters of interest to them before the State Industrial Board.

We are mighty anxious to meet you; to know your opinion on matters and to see where we can make ourselves useful to you. Please consider this a personal invitation to make our office your headquarters whenever you are in Indianapolis.

Yours, for the welfare of the Association,
FREDERICK E. SCHORTEMEIER,
Executive Secretary.

308 Hume-Mansur Building, Indianapolis,
Indiana.

CONCERNING the dirty offices of doctors, we have the following from a friend who writes us concerning a visit in a town in the southern part of the state:

While in ——— I went into a doctor's office that was about the dirtiest I ever saw. Bedbugs actually were crawling over the dilapidated lounge in the front room; the carpet was worn; and altogether a "ratty" condition existed. I felt as if I wanted to stand on stilts or rubber boots in such a place, yet there were five women and two men waiting for the doctor. Seeing that I could not meet the doctor very soon, I went up the street and called on a young physician who had recently come to town. His office was clean, and had new linoleum on the floor; the walls were newly papered; the woodwork painted; and everything had the appearance of being clean and sanitary. The doctor himself was neat and clean, and the magazines and papers on his table were neatly arranged. He was waiting patiently, in loneliness, for patients, but the open medical book proved that he was employing his time well. Why is it people act in this way? The young man had a clean office, and apparently was very much better equipped, mentally and otherwise, to practice medicine, than the older man, and yet the patronage went to the old fellow. I was reminded of Oliver Wendell Holmes' couplet:

"Each lends the graces that are bound to please,
Folks like their doctors mouldy like their cheese."

We might add that it is not always thus. The people are gradually, but none the less surely, waking up to the fact that their doctors must be progressive like everyone else, and the young man, well equipped mentally and with a clean and inviting office, has but to exercise a little more patience and he will be rewarded.

To a large number of surgeons and specialists the annual sessions of the Clinical Congress of Surgeons of North America have been events of great importance, and the more progressive surgeons and specialists have seldom failed to attend these sessions. The announcement of the Eighth Annual Session, to be held in New York City on October 22 to 27, 1917, will bring a shock to some surgeons and specialists who look with favor upon the practice of fee splitting, for the Congress, at the last session in Philadelphia, unanimously adopted and made one of the basic requirements for membership in the organization the following resolution:

Be It Resolved: First, that the Executive Committee of the Clinical Congress of Surgeons of North America is instructed to provide that hereafter the clinics of the Congress shall be open only to those surgeons who in their respective practice and intent are opposed to the division of fees. Second, that the

meaning of the division of fees be interpreted in substance as follows:

I hereby declare that I do not and that I will not engage in the practice of the division of fees under any guise whatever; that I neither collect fees for others referring patients to me, nor permit others to collect fees for me, nor make joint fees with physicians or surgeons referring patients to me for operation or consultation, nor will I knowingly permit any agent or associate of mine to do so.

The last paragraph of this resolution very definitely points out what is considered division of fees, and, in view of the difference of opinion as to what constitutes the division of fees, is quite illuminating.

OUR Executive Secretary is beginning to find out that doctors, as a class, are very indifferent to the interests of the medical profession as a whole, and, therefore, indifferent to their own interests as individuals. He expresses his disapproval of the treatment accorded him by some of the county medical society secretaries, and we quite agree with him that he has valid reason for complaint. It is the height of discourtesy not to answer letters and telegrams of importance, and there is ample evidence to show that some county medical society secretaries and many doctors in different sections of Indiana have been guilty of failure to respond in any way to very urgent requests for information or action as an aid to the Legislative Committee at Indianapolis. The trouble of it is, too many medical men are interested only in themselves, and they are not willing to turn their hands over for the general good, and even when there is anything doing for their own good they want someone else to do the work of making the enterprise successful. Such fellows usually can find time to help in tearing down the reputation of successful confrères, or in planting the seeds of dissension in medical societies, for they usually are a trouble-making lot. If the Executive Secretary—who fortunately for the good of the Association does not happen to be a medical man—can straighten out some of these unfortunate conditions in our profession, he will have served a valuable purpose and be of inestimable worth to the profession. Here is hoping that he can accomplish his avowed purpose of making every member of the Indiana State Medical Association an active and harmoniously working member of the Association or get him out of the Association where he will cease to be dead weight for the other members to carry around!

THERE is no question but that accident insurance companies are defrauded often by unscrupulous policy-holders who claim excessive indemnity for trivial injuries, or even malingering. However, the average accident insurance company also takes advantage of the policy-holder whenever possible, and one of the ways in which this is done is through the clever wording of the policy so that the company does not become liable for certain injuries, injuries occurring under certain conditions, or certain conditions under which injuries are treated. For instance, the clause requiring confinement to the house in order to obtain total disability indemnity is a positive injustice to many who have major injuries but who are able to walk to the surgeon's office or to the hospital for treatments and dressings. We believe in protecting the insurance company from downright fraud, but we also believe in protecting the policy-holder from being defrauded by the insurance companies. And there is plenty of opportunity for doctors to render valuable assistance by insisting upon the total disability clause, when the very nature of the injury unquestionably points to total disability and the justice of such a classification when settling the indemnity claim of the policy-holder. This reminds us that the average policy-holder never reads his policy and does not know what is in it until he tries to secure some return for the premiums that he has paid. He trusts to the honesty of the insurance company, and not infrequently his trust is misplaced and especially when he insures in some of the small or little-known companies. It is quite true that most of the states attempt to protect the policy-holder, but the insurance company that desires to evade the law will find means of doing so, and there are plenty of companies that legally cannot be forced to make a settlement for injustices practiced as a direct result of the tricky wording of a policy.

FROM the New York *Sun* of December 18, we clip the following:

The magazines as well as the newspapers have been hit hard by the immensely increased cost of white paper and other materials necessary to printing and art work. Announcement was made yesterday that many periodicals have been forced to raise their prices.

The *Metropolitan* will jump from \$1.50 to \$2 a year, *Vogue* from \$4 to \$5, *Country Life* from \$4 to \$5, *McClure's* from \$1 to \$1.50, *Cosmopolitan* from \$1.65 to \$2.20, *Nautilus* from \$1.10 to \$1.60. *Hearst's* from

\$1.65 to \$2.20, *Photoplay* from \$1 to \$1.20. *Journal of Education* from \$1.75 to \$1.85, *Outlook* from \$2.75 to \$3.35.

This is but a partial list of the magazines that have of necessity been compelled to increase their subscription price as well as the single issue price. Many of them have had at this time to renew their contracts for paper, and so were obliged to meet the extra expense in the only way possible. Those of the magazines fortunate enough to have longer contracts are safe enough for the time being, but they realize that something will have to be done in the near future.

Nearly one hundred newspapers in the United States have had to raise prices and have notified their readers that the increase will go into effect with the new year. Most of the newspapers of the country are now making their contracts for white paper for the coming year and have found that they will have to pay nearly 50 per cent. more than in the past. Where white paper formerly cost from 2 to 2½ cents a pound it now costs nearly 3½ cents a pound and the magazines, of course, have been subjected to the same cost strain. Of the twenty smaller magazines in New York several have decided to suspend publication entirely and others will merge with publications controlled by the same interests.

Medical journals have fared no better, as nearly all of them have been forced to raise their subscription rates in order to meet the increased cost of publication, and a few have actually suspended publication. Most of the state journals have had to dip into their treasuries to make up deficits, and not a few of the state medical associations have raised their dues to meet the increased demands. In passing it may be well to say that the proposed raise of dues of the Indiana State Medical Association is not with a view to meeting any deficit or making any additional appropriations for THE JOURNAL. The increase is needed for the purpose of meeting the necessary expenses incident to greater activity on the part of the Association in organization and other work of vital interest to the members of the profession, both individually and collectively. Nearly all of the increased income will be utilized by the Executive Secretary in legislative and organization work, and we predict that it will bring returns that could not be secured in any other way. In reality the amount collected from each member of the Association is insignificant, and we do not believe that there will be the slightest objection to the contemplated raise in the dues when the membership appreciates the value of the work that is accomplished as it will after a few months of activity on the part of the Executive Secretary.

DEATHS

WILLIAM W. YANDELL, M.D., Bedford, aged 88 years, died January 8.

WYMAN H. FISCHER, M.D., Wanatah, died January 6, aged 65 years.

JOHN C. CULLEN, M.D., aged 79 years, died January 18 at his home in Anderson.

HANNIBAL LANDON, M.D., died January 6 at his home in Remington, aged 76 years.

JAMES GILBERT VAN DE WALKER, M.D., Hammond, died January 19, aged 82 years.

JANE N. GRAY, wife of Dr. Simeon Gray of Worthington, died January 25, aged 69 years.

LEONARD W. ESTABROOK, M.D., died January 8 at his home in Springport, aged 83 years.

EDMUND T. SPOTTSWOOD, M.D., aged 90 years, died January 5 at the home of his daughter in Terre Haute.

DEBORAH L. HOPKINS, wife of Dr. R. R. Hopkins of Richmond, departed this life Nov. 10, 1916, aged 69 years.

MRS. SEYMOUR, wife of Dr. Calvin A. Seymour of Wawaka, died very suddenly from apoplexy January 7, aged 64 years.

SAMUEL LORD, M.D., aged 86 years, formerly of Telluride, Colo., died January 8 at the home of his son, S. G. Lord, at Jeffersonville.

CHARLES A. STAFFORD, M.D., died at his home in Indianapolis January 13, aged 52 years. He had been ill for seven years.

JOHN W. SMITH, M.D., Plymouth, died January 2, aged 61 years. He was a graduate of the medical department of the University of Pennsylvania, 1877.

THOMAS J. MCCAIN, M.D., Waldron, died January 22, aged 72 years. He was a veteran of the Civil War, and had practiced medicine in Shelby County for thirty-five years.

ARTHUR M. HAIGHT, M.D., formerly of Indianapolis, died January 16 at the home of his daughter at Greenfield, aged 67 years. Dr. Haight practiced medicine in Michigan for more than forty years, and was a member of the Michigan State Medical Society.

ISAAC C. LAMBERT, M.D., Colfax, died January 25 of pneumonia. Dr. Lambert was 67 years of age, graduated from Kentucky Medical School, and had practiced medicine in and around Colfax for over forty years. He was a member of the Indiana State Medical Association and the American Medical Association.

FREDERICK W. KIENZLE, M.D., of Lynn, despondent over ill health, committed suicide at the home of his mother at Greensfork, January 14, aged 38 years. Dr. Kienzle graduated from Indiana University School of Medicine in 1902, practiced medicine at Greensfork and Lynn, and was a member of the Indiana State Medical Association.

PITT YANDELL MCCOY, M.D., died January 12 at his home in Evansville following an illness of several months, aged 76 years. Dr. McCoy was born in Golconda, Illinois, June 29, 1841; attended Franklin College; began the study of medicine at Golconda under Count Albert De Leczynski, a Polish exile, who was a graduate of University of Vienna; and graduated in medicine from Rush Medical College in 1863. Since his graduation he has taken a number of post-graduate courses in Chicago, New York, Philadelphia, etc. He located at Evansville in 1873 where he built up a large practice, and was recognized as one of the leading physicians and surgeons of the southern part of the state. During his existence, he held the chair of surgery in the Evansville Medical College. He was division surgeon of the L. & N. Railway; president of the staff of St. Mary's Hospital; a member of the Indiana State Medical Association, and fellow of the American College of Surgeons, Clinical College of Surgeons of North America, and the American Medical Association.

WILLIAM E. GREEN, M.D., of Albion, died January 23 at the Methodist Hospital at Indianapolis from pneumonia contracted while serving his State as senator from Noble, LaGrange and Steuben counties. Dr. Green was born in Montgomery County, Indiana, March 29, 1857; attended Purdue University, and graduated in medicine from Rush Medical College, Chicago, in 1878. He began the practice of medicine at Brimfield, Indiana, removing to Albion in 1883, where he continued to be active in his profession until the time of his death. As a physician, he stood among the foremost in his community; as a gentleman, his unfailing courtesy and kindness, and his firm stand for the right, stamped him as such; and as a citi-

zen, his staunch loyalty to his county and state was attested by his closing words in his message to the Senate, resigning his committee appointments, "I am sincerely for Indiana." He was a member of the Noble County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

GENERAL

DR. E. E. EVANS of Gary has resigned his position as deputy coroner.

DR. JOHN C. DAVIS of Logansport has been appointed county physician for Eel township.

DR. HARRY EDGAR DEES of Bicknell was married on January 11 to Miss Naomi Robertine Cox.

DR. HUGO BRANYAN, formerly of Clyde, N. D., has located at Huntington for the practice of medicine.

THE Cincinnati Lancet-Clinic, one of the oldest medical journals of this country, has ceased publication.

DR. PERRY C. TRAVER of South Bend has returned after several months' service in the Panama Canal Zone.

DR. AND MRS. FRANK E. ABBETT and children of Indianapolis have gone to Miami, Florida, for a short stay.

DR. BROWN S. MCCLINTIC of Peru, who has spent three years in service with the Russian army, is on his way home.

DR. D. A. MCCLEARY of Camden was stricken with paralysis January 13, but is making a satisfactory recovery.

DR. WILLIAM S. STONE has been appointed assistant director of cancer research at the Memorial Hospital, New York.

DR. DONALD MCCLELLAND, who has been in service on the Mexican border, has been mustered out and returned to Huntington.

THE new office building of Dr. Ira E. Bowman of Odon has been completed, and Doctor Bowman is installed in his new quarters.

DR. JOHN S. BILLINGS, after twenty years' service in the New York Department of Health, has offered his resignation to take effect May 1.

DR. MAUDE ARTHUR of Washington is serving a six months' appointment as interne in the New York Infirmary for Women and Children.

DR. WILL E. THOMAS, formerly of Clarksburg, has located at Greensburg and taken over the practice of his brother, the late Dr. R. M. Thomas.

DR. LOREN A. HYDE of Indianapolis will succeed Dr. Benjamin S. Potter as superintendent of the county hospital for incurable insane at Julietta.

PROFESSOR REID HUNT of Harvard Medical College is the newly elected president of the American Society of Pharmacology and Experimental Therapeutics.

MISS MARGARET MILLER of the Miller Hospital at New Castle entertained the Henry County Medical Society at a banquet at the hospital on January 10.

DR. FRANK BROUGHTON of Kendallville has gone to Chicago to take post-graduate work. He has not decided where he will locate after completing his special work.

THE Sisters at St. Elizabeth Hospital, Lafayette, gave their annual banquet to the physicians of that city on January 10. Dr. George F. Beasley presided as toastmaster.

DR. CARY T. GRAYSON, for four years friend and private physician to President Woodrow Wilson, has been promoted to Medical Director in the Navy with the rank of Rear Admiral.

THE Perry County Medical Society, at a recent meeting, elected the following officers for 1917: President, Wm. H. Muelchi; vice-president, N. A. James; secretary, D. S. Conner.

DR. EDWARD F. JOHNSTON, formerly interne at the Methodist Hospital, Indianapolis, but now located at Star City, was married January 2 to Miss Mary L. White, a nurse at the Methodist Hospital.

THE marriage of Dr. E. Ray Royer of North Salem to Miss Olive E. Lender of Spokane, Washington, was solemnized recently at the Claypool Hotel, Indianapolis. They will reside in North Salem.

THE National Institute of Social Science, at their recent New York meeting, awarded gold medals to Colonel William C. Gorgas, surgeon general of the United States Army, and Dr. George W. Crile of Cleveland.

DRS. FRANK HOLLAND, F. M. Gardner, and Raymond Akin have returned to Bloomington, and will continue their practice of medicine, after serving in the medical corps of the national guard since last June.

THE following officers of the Miami County Medical Society have been elected for 1917: President, D. L. Wallace; vice-president, J. O. Ward; secretary-treasurer, J. E. Yarling; censor, C. J. Helm; delegate, J. P. Spooner.

AT the annual banquet of the Daviess County Medical Society, held January 4 at the Hyatt Hotel, Washington, Dr. T. C. Kennedy of Indianapolis was the guest of the Society, and presented a paper on the subject of cancer.

THE doctors of the Gary Medical Society met early in January and elected the following officers for the new year: President, Dr. E. E. Evans; vice-president, Dr. M. S. Hopper; secretary, Garrett O. Verplank; treasurer, Dr. Alexander.

DR. T. R. BASS, for some time associated with Dr. W. L. Hammersley of Frankfort in the practice of medicine, has accepted a position as surgeon in the National Military Home at Dayton, Ohio, and removed to that place early in January.

THE annual election of the Vanderburgh County Medical Society resulted as follows: President, L. E. Fritsch; vice-president, G. W. Varner; secretary-treasurer, R. B. Bretz; censor, M. Ravdin; delegate, A. M. Hayden, alternate, Carl G. Viehe.

THE Madison County Medical Society elected the following officers to serve the ensuing year: President, T. M. Jones, Anderson; vice-president, Doris Meister, Anderson; secretary-treasurer, Seth Irwin, Summitville; censor, L. F. Mobley, Summitville.

DR. S. B. ELROD has moved his family from Henryville to Jeffersonville where he will engage in practice. He will continue to operate his drug store at Henryville, and will have office hours for patients in that city on Wednesdays and Saturdays.

DR. G. L. SHOEMAKER, wife and son, Lawrence, of North Manchester, left December 18 for Seabring, Florida, where Mrs. Shoemaker and son will remain during the winter. Dr. Shoemaker went on to Cuba to attend to some business interests, returning from there home.

THE physicians of Grant County have been trying out a system of collection which is proving very satisfactory. They have organized what they call the Physicians' Rating and Collecting Agency of Grant County, which is in charge of a financial secretary—a layman.

IF the request of Indiana University for \$400,000 for a new medical building be granted by the Legislature, the suggestion is afloat that the old medical school property be transferred to the state, for the equipment of quarters for those offices which are crowded out of the State House.

THE State Board of Medical Registration and Examination has elected the following officers for the new year: President, Dr. W. A. Spurgeon, Muncie; vice-president, Dr. James M. Dinnen, Fort Wayne; treasurer, Dr. M. C. Canfield, Frankfort; secretary, Dr. W. T. Gott, Crawfordsville.

ANNOUNCEMENT has been made that Mrs. Clarissa Smith of Richmond has given a \$21,000 homestead (located four miles south of Richmond) to Wayne County for the establishment of an anti-tuberculosis hospital. The new hospital will be known as the George H. and Clarissa Smith Hospital.

THE seventh mid-year meeting of the Medical Section of the American Life Convention will be held in Excelsior Springs, Missouri, March 7, 8, and 9, 1917, at the Elms Hotel. They have issued a very interesting looking preliminary program, and among Indiana doctors whose names appear thereon are Dr. C. H. English, Fort Wayne; Dr. M. M. Lairy, Lafayette; Dr. P. E. McCown, Indianapolis; Dr. C. H. McCaskey, Indianapolis; Dr. G. V. Woollen, Indianapolis; Dr. H. E. Sharrer, Hammond. Dr. F. W. Foxworthy of Indianapolis is chairman of this Section.

THE Blackford County Medical Society and the Delaware County Medical Society met in joint session January 12, and by action of the physicians of both counties the societies were merged and hereafter will be known as the Blackford-Delaware Medical Society. Meetings will be held the first Friday of each month.

DR. RICHARD B. WETHERILL of Lafayette has published in very attractive booklet form his address, "A Visit with the Anios of Volcano Bay," delivered before the Tippecanoe County Medical Society in December, 1916. The booklet contains many illustrations which add much to the attractiveness and interest of the article.

DR. JOSEPH RILUS EASTMAN of Indianapolis, who has been in charge of a hospital unit in Austria for several months, is on his way home, having sailed February 8 via S. S. United States which is due in New York around February 20. Mrs. Eastman and son Joseph are visiting friends in Atlantic City. Dr. Eastman will meet them there and accompany them home.

THE Howard County Medical Society announces the following officers for the ensuing year: President, Dr. F. N. Murray, West Middleton; vice-president, Dr. F. R. Bannon, Kokomo; secretary, Dr. R. P. Schuler, Kokomo; delegate to State Convention, Dr. W. I. Scott; delegate to District Convention, Dr. E. N. Bennett; censors, Drs. D. C. Peters, L. M. Knepple, and T. C. Cochran.

ANNOUNCEMENT has been made that Dr. C. E. Peters of the Danville Soldiers' Home has been appointed Assistant Chief Surgeon at the Marion Soldiers' Home Hospital to take the place of Dr. William Braulin, whose resignation became effective January 7. Dr. Peters was formerly assistant surgeon of the Marion Home, but was transferred to Danville a few months ago.

MR. JOHN D. ROCKEFELLER, JR., president of the Rockefeller Foundation since 1913, has tendered his resignation, same to take effect May 15, 1917, when he will become chairman of the Board of Trustees. George Edgar Vincent, Ph.D., LL.D., president of the University of Minnesota and formerly dean of the faculties of arts, literature, and science of the University of Chicago, will succeed Mr. Rockefeller. It is announced that there will be no change in the policy of the foundation.

AN Ophthalmological Service Department has been added to Bellevue Hospital, New York, in charge of Dr. Charles H. May as attending surgeon, with Drs. Julius Wolff and John M. Wheeler as principal assistants. The department is located in the new surgical building, but is entirely distinct from the rest of the hospital, having its own operating, examining and dressing rooms, and a staff of attending surgeons, internes and nurses.

MR. JACOB H. SCHIFF of New York, on his seventieth birthday, made the following gifts to charitable institutions: To the Montefiore Home and Hospital, \$100,000 to be used for research work; to the American Red Cross Society, for war relief in Europe, \$100,000; to the Henry Street Settlement, \$25,000. By the will of the late Martha L. Binder of Philadelphia the Presbyterian Hospital receives \$2,000; the Methodist Hospital, \$1,000; and the Episcopal Hospital, \$500.

DR. H. O. BRUGGEMAN of Fort Wayne left the latter part of November for Austria where he will have charge of Austrian Reserve Hospital No. 8, under the direction of the American Red Cross Association. In reality he takes up the work of Dr. J. R. Eastman of Indianapolis, who has been in service for the past year, and who returns to this country in March. Dr. Bruggeman is a graduate of Rush Medical College and studied surgery in Vienna and Berlin for a number of years.

THE Henry S. Wellcome prize competition has resulted in the awarding of a gold medal, with \$300, to Dr. Mahlon Ashford, Captain, Medical Corps, United States Army, on his essay "The Organization of Medical Officers;" and the awarding of a silver medal and \$200 to Dr. William C. Rucker, assistant surgeon general of the United States Public Health Service, for essay on "The Influence of the European War on the Transmission of the Infectious Diseases."

THE annual meeting of the Ohio State Medical Board was held at Columbus, January 2, and the following officers were elected for the ensuing year: President, Dr. John H. J. Upham, Columbus; vice-president, Dr. John K. Scudder, Cincinnati; secretary, Dr. George H. Matson, Columbus (reelected); treasurer, Dr. Sylvester M. Sherman, Columbus (reelected). Eugene C. Waters, Chillicothe, was appointed on the osteopathic committee.

DR. ARVINE E. MOZINGO, formerly of North Salem, has purchased the practice of Drs. C. V. and C. L. Smith at Tipton, and located at that place. Dr. Mazingo is a graduate of Indiana University School of Medicine (1913), had one year internship in the Methodist Hospital at Indianapolis, eighteen months in the Metropolitan Hospital at New York City, served six months as ship surgeon, and is now locating in his home county. Drs. Smith are going to Detroit.

DURING January the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Merck and Company: Barium Sulphate, Merck, for X-Ray Diagnosis Theobromine, Merck.

Powers-Weightman-Rosengarten Co.: Barium Sulphate, P. W. R., for X-Ray Diagnosis.

Western Chemical Company: Tabellae Dulces Aristochin (Western), 1 gr.; Tabellae Dulces Heroin (Western), 1/100 gr.; Tabellae Dulces Novaspirin (Western), 1/4 gr.; Tabellae Dulces Tannalbin (Western), 1 gr.; Tabellae Dulces Terpin Hydrate with Heroin (Western), 1/100 gr.

At the request of the Council of National Defense and the secretary of war, deans and representatives from more than eighty medical schools of the country convened at Washington, January 6. The preliminary meeting was called to order by Dr. Franklin H. Martin of Chicago, who stated that the object of the meeting was to agree on some basis of cooperation between the medical schools of the country and the army and navy, whereby the depleted medical branches of the service might be recruited to full strength from the eligible graduates of the medical schools this summer. Dr. Edward Martin of the University of Pennsylvania was called to the chair and introduced Surgeons-General Gorgas and Braisted, who set forth the needs of the army and navy medical departments. Plans for courses on military and naval surgery were presented by Col. William H. Arthur, director of the Army Medical School, and Surgeon Edward R. Stitt of the Navy Medical School. The curriculum provides for two lectures a week, the course to begin on February 1. Dr. Victor C. Vaughan of the University of Michigan presented a resolution favoring universal military training and petitioning the secretaries of war and of the navy to supply the medical schools with instructors on medical surgery and sanitation. Dr. Arthur

H. Law of the University of Minnesota presented a resolution petitioning Congress to modify the army act of June 3, 1916, so as to make express provision for the detailing of medical officers of the army as instructors in military surgery and hygiene in medical colleges. Both of these resolutions were adopted. Major Robert E. Noble of the army presented the needs of the Medical Corps and stated that by July, 1920, the army would need 1,110 medical officers to complete its full quota. In the afternoon the members of the conference were received by the president and secretaries of war and of the navy. Secretary Baker welcomed the officers and thanked them for their interest in medical preparedness.—*Journal A. M. A.*, Jan. 13, 1917.

THE American Association for Labor Legislation, with headquarters at New York City, has just issued a pamphlet entitled "Medical Provisions of the Tentative Draft of an Act for Health Insurance," which sets forth the important advances in plans for organization of medical care under health insurance. Adequate medical representation is provided in the new sections of the act by the fact that the physician member of the state commission is supplemented by a state advisory board elected by the state medical societies. This board passes on regulations issued by the commission affecting medical benefit, and hears and reports on disputes appealed to the commission. It is stated further that medical interests also secure valuable participation in local organizations through the local medical committee, while the foresighted provision for the representation of different groups—health department, general practitioners and specialists—on the committee is assigned to maintain a just balance among the varying medical interests. This committee has the opportunity of discussing local medical regulations before they are put into operation by the directors of the local insurance fund, and also hears any cases of disagreement relating to medical benefit. If it is unable to settle the difficulty, appeal is taken to an arbitration committee composed of representatives of the physicians, of the local health insurance fund and an impartial chairman. Another important gain is made by the provision that, because of the desirability of separating the functions of certifying an insured person as eligible for benefit and of actually treating him, in order to avoid the embarrassing situation existing in Germany, where a physician acts as plaintiff and defendant at the same time, medical officers, not per-

mitted to practice under the act, alone have authority to issue certificates of disability, and only if its issuance has been recommended by the attending physician. Of course, the value of this provision is only assured by the selection of high grade men by the local funds, and this is taken care of by the fact that the medical advisory board, elected by the state medical societies, shall establish the qualifications, and that the local medical committee shall have power to veto undesirable appointments. We believe that this is an important advance, and, with the Council of the Medical Society of the State of New York, we express our opinion that these provisions at one time safeguard the public interest, the public health and the welfare of the medical profession.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Treasurer's Report

EXHIBIT "A"

SUMMARY OF TREASURER'S REPORT

Balance on hand Jan. 1, 1916.....	\$3,039.34
Received from county societies.....	5,170.00
Received from Exhibits annual session.....	215.00
	\$8,424.34
Disbursements (see Exhibit "C" for details and "B" for analysis).....	\$5,832.78
Balance on hand Jan. 1, 1917.....	\$2,591.56

EXHIBIT "B"

ANALYSIS OF EXPENDITURES

Journal subscriptions	\$1,938.75
Medical defense fund.....	1,938.75
Printing and stationery.....	224.56
Councilors' expenses	44.23
Secretary's honorarium and expenses.....	379.84
Fort Wayne Session (\$901.53)	
Rent	100.00
Stenographers	343.00
Badges	33.75
Programs	29.75
Committees	86.91
Speakers	192.11
Music	60.00
Miscellaneous	34.51
Commission	21.50
Executive secretary's expense.....	387.62
Treasurer's bond	17.50
Total	\$5,832.78

A review of the Association's expenses shows that the trend is decidedly upward. The total expense in 1914 was \$4,980; 1915, \$5,679, and this year \$5,832. This is offered to the members as an explanation as to why it will be necessary to raise the dues at the Evansville session.

EXHIBIT "C"

Detailed statement of disbursements of Charles N. Combs, Treasurer Indiana State Medical Association, for the fiscal year ending Dec. 31, 1916. The serial number corresponds to the voucher and cancelled check on file, all of which have been examined by the auditing committee of the Council and attested correct. For economy of space, several have been grouped together.

Voucher and Check No.

39-44-48-54-92. Dr. A. E. Bulson, Jr. (Subscriptions to Journal for the entire year).....	\$1,938.75
38-45-49-53-93. Dr. J. R. Eastman (Medical Defense fund for the entire year).....	1,938.75
42-68-72. Cleary & Bailey (Printing).....	174.51
60-77-83. The Viquesney Co. (Printing).....	63.80
65-66-67. Fort Wayne Papers (Advertising).....	4.70
40. Terre Haute Printing Co. (Printing)...	5.00
41. Dr. E. E. Morgan (Councilor expenses).....	14.10
43. Moore-Langen Printing Co. (Printing).....	2.75
46. Dr. J. G. Jones (Councilor expenses).....	6.40
47. Am. Med. Assn. (A. M. A. Directory).....	8.00
50. Dr. W. B. Kitchen (Councilor expenses).....	5.08
51. Pivot City Press (Printing).....	9.00
52. Dr. Alfred Henry (A. M. A. Exhibit, Detroit Meeting)	86.91
55. Dr. Charles N. Combs (Secretary's Honorarium)	300.00
56. Dr. J. C. Bloodgood (Expenses).....	57.96
57. George V. Sheridan (Expenses).....	15.30
70. Dr. H. A. Christian (Expenses).....	63.00
71. Anthony Hotel (Expenses).....	3.00
58. Dr. A. E. Bulson, Jr. (Theater rent).....	50.00
59. Dr. Charles N. Combs (Secretary's incidental expenses)	79.84
61. Dr. G. W. H. Kemper (Councilor expenses and Necrology Committee).....	18.65
62. Guy W. Kite, Mgr. (Elks Club rent).....	50.00
63. Dr. A. E. Bulson, Jr. (Fort Wayne incidental expenses)	12.61
64. European School of Music (Music for public meeting)	60.00
69. American Medical Assn. (Programs).....	25.00
73. F. E. Dillan (Stenographer).....	100.00
74. M. B. Osburn (Stenographer).....	81.65
75. Edith Reinking (Stenographer).....	60.00
76. Dr. Miles F. Porter, Jr. (Commission of Exhibit Manager)	21.50
78. P. E. Allen (Treasurer's bond).....	17.50
79. Dr. William C. Posey (Expenses).....	46.20
80. Howe S. Landers (Expenses).....	4.65
81. Fort Wayne Special Furniture Works (X-Ray box)	10.00
82. Brown Trucking Co. (Fort Wayne drayage)	7.00
84. William Whitford (Stenographer).....	92.55
85. Emma Ringwalt (Registration clerk).....	9.00
86. F. E. Schortemeier (Incidental expenses, executive secretary)	42.00
87. Fertig & Kevers (Sign Indianapolis office)	2.25
88. Remington Typewriter Co. (Typewriter executive secretary)	85.70
89. Dr. Albert E. Sterne (Rent Indianapolis office)	50.00
90. W. K. Stewart Co. (Furniture, executive secretary's office)	117.67
91. The Oilar Bros. Co. (Furniture executive secretary's office)	90.00

COUNCILORS' REPORTS

FIRST DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Gibson.....	26	33	7	7	8	16	4	..
Perry.....	10	12	..	..	..	..	..	..
Pike.....	18	15	7	2	7	4	6	..
Posey.....	19	16	..	..	..	..	..	..
Spencer.....	20	22	..	..	..	..	..	..
Vanderburg.....	79	73	0	23	25	20	46	..
Warrick.....	14	13	12	3	7	..	..	..
Totals.....	186	184	..	..	..	..	..	..

SECOND DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Daviess.....	26	26	8	11	8	5	12	0
Knox.....	47	45	15	12	14	10	2	1
Greene.....	21	20	..	..	..	..	..	0
Martin.....	10	11	1	2	6	0	0	1
Monroe.....	20	22	10	6	7	3	3	0
Sullivan.....	33	35	2	9	16	17	3	8
Owen.....	16	10	6	8	5	10	..	0
Totals.....	173	169	..	..	..	..	..	10

THIRD DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Clark.....	16	11	..	..	..	..	..	..
Crawford.....	8	7	..	..	..	..	..	..
Dubois.....	19	17	..	..	..	..	..	..
Floyd.....	28	30	..	..	..	..	..	..
Harrison.....	8	5	..	..	..	..	..	..
Lawrence.....	24	24	..	..	..	..	..	..
Orange.....	15	17	..	..	..	..	..	..
Scott.....	4	3	..	..	..	..	..	..
Washington.....	5	4	..	..	..	..	..	..
Totals.....	127	118	..	..	..	..	..	..

FOURTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Bartholomew.....	22	27	14	9	11	9	4	0
Dearborn-Ohio.....	24	24	5	10	8	7	4	0
Decatur.....	17	17	..	..	..	..	..	0
Jackson.....	24	23	7	8	12	3	3	0
Jefferson.....	23	18	..	..	..	..	..	1
Jennings.....	19	16	0	6	6	1	15	6
Ripley.....	18	17	..	..	..	..	..	0
Switzerland.....	9	10	..	..	..	..	..	0
Totals.....	156	152	..	..	..	..	..	7

FIFTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Clay.....	20	21	9	8	9	10	5	..
Parke-Vermillion.....	26	25	2	10	14	9	3	..
Putnam.....	21	20	..	..	..	..	..	..
Vigo.....	91	85	15	25	15	25	15	..
Totals.....	158	151	..	..	..	..	..	..

SIXTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Fayette.....	13	14	3	1	5	0	0	..
Franklin.....	6	7	7	4	5	4	2	..
Hancock.....	19	21	0	11	8	4	50	..
Henry.....	34	35	20	12	15	19	14	..
Rush.....	20	20	4	0	0	0	0	..
Shelby.....	15	17	..	..	..	..	..	..
Union.....	8	7	1	6	6	12	4	..
Wayne.....	52	55	..	11	19	22	12	..
Totals.....	167	176	..	..	..	..	..	..

SEVENTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Hendricks.....	29	27	4	4	12	8	15	2
Johnson.....	19	17	6	6	7	3	3	1
Marion.....	313	321	427	29	87	50	31	30
Morgan.....	16	16	..	4	6	0	0	1
Totals.....	377	381	437	43	112	61	49	34

EIGHTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Blackford.....	16	16	2	0	0	0	0	..
Delaware.....	58	60	14	12	21	11	20	..
Jay.....	21	17	..	..	..	..	..	..
Madison.....	62	53	6	10	25	9	3	..
Randolph.....	32	29	3	20	9	21	16	..
Totals.....	189	175	25	42	55	41	39	..

NINTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Clinton.....	19	18	6	7	8	7	..	..
Boone.....	20	18	2	4	6	2	6	..
Ft. Warren.....	34	31	..	8	11	10	10	..
Hamilton.....	21	25	6	11	8	8	2	..
Howard.....	31	36	14	9	8	8	0	..
Montgomery.....	36	36	24	8	9	4	15	..
Tippecanoe.....	58	58	4	14	9	8	40	..
Tipton.....	16	15	6	2	8	0	0	..
Totals.....	235	235	62	63	65	47	73	..

TENTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Benton.....	14	12	2	2	6	0	0	0
Jasper-Newton.....	19	24	0	12	10	20	10	0
Lake.....	84	77	14	11	26	16	9	10
Laporte.....	47	50	2	10	15	17	8	1
Porter.....	22	20	2	4	..	7	..	1
Totals.....	186	183	20	39	57	60	27	12

ELEVENTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Carroll.....	28	28	..	..	..	..	..	..
Cass.....	43	44	3	16	8	21	16	..
Grant.....	54	51	0	12	20	11	..	12
Huntington.....	36	34	4	10	13	9	3	1
Miami.....	27	30	12	10	7	20	10	..
Wabash.....	28	25	32	8	15	10	..	2
White.....	9	6	..	0	0	0	0	..
Totals.....	225	218	..	..	..	..	..	..

TWELFTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Adams.....	19	21	2	10	10	12	19	..
Allen.....	101	96	..	40	24	39	46	30
DeKalb.....	19	21	0	4	8	0	..	1
Lagrange.....	21	19	..	..	..	..	..	1
Noble.....	30	30	2	3	25	6	0	..
Steuben.....	18	19	..	9	6	9	20	..
Wells.....	27	25	2	18	12	6	20	1
Whitley.....	16	16	3	4	21	7	10	2
Totals.....	251	247	..	..	..	..	..	..

THIRTEENTH DISTRICT

	Members, 1915	Members, 1916	Eligible Members	No. of Society Meetings	Av. Attendance	No. of Scientific Papers	No. of Reports	No. of Visits of Councilor
Eikhart.....	57	57	10	9	24	20	3	..
Fulton.....	16	14	3	5	8	8	..	..
Kosciusko.....	25	22	4	4	13	6	13	..
Marshall.....	25	24	..	..	..	..	..	..
Pulaski.....	5	5	12	3	8	4	0	..
Starke.....	7	7	..	..	..	..	..	..
St. Joseph.....	60	67	..	..	..	..	..	..
Totals.....	195	196	..	..	..	..	..	..

REPORT OF SECRETARY FOR THE FISCAL YEAR
ENDED DEC. 31, 1916

Membership Jan. 1, 1916.....	2,625
New members 1916.....	175
	<hr/> 2,800
Deceased	29
Resigned	5
Expelled	0
Removed from state.....	28
Dropped for nonpayment of dues.....	153
	<hr/> 215
Membership Jan. 1, 1917.....	2,585

This is the first year in which it is necessary to chronicle a loss of membership. This is rather a disappointment, but it may be simply due to the fluctuation to be expected in dealing with large numbers. However, the loss can easily be explained by reference to the comparative number of new members secured in 1916, which was 175, as contrasted with 262 in 1915. It will be one of the duties of the business office of this Association this year to make an active campaign among the eligible non-members, as with the present field, there is no reason why the number of new members should not exceed the number of delinquents.

The councilors' reports indicate which counties have lost and which have gained. The totals for the districts reveal a rather even distribution, so that there has been no particular delinquency in any one part of the state. The following counties have the largest membership since 1910: Marion, Delaware, Wayne, Henry, Howard, Franklin and Jasper-Newton, while the following have reached the low water mark in the last six years: Vigo, Vanderburg, Huntington, Greenc, Jackson, Putnam, Clark, Harrison, Jay, Jennings, Owen, Warrick, White and Scott. The same number of counties reported memberships, namely, every county except Brown, although some of the societies are still inactive, a few holding no regular meetings whatsoever.

CHARLES N. COMBS, Secretary-Treasurer.

REPORT OF THE ANNUAL MEETING OF THE
SEVENTH INDIANA COUNCILOR DISTRICT
MEDICAL ASSOCIATION,
HELD AT MARTINSVILLE,
INDIANA

Dec. 6, 1916

The meeting was called to order by the president, Dr. Amos Carter of Plainfield. The program was as follows:

Meeting held at Public Library, 2:15 p. m.

1. President's address, Dr. Amos Carter, Plainfield.
2. Report of Four Cases of Sub-Phrenic Abscess, Dr. E. M. Kime, Indianapolis. Discussion opened by Dr. C. G. Bothwell, Martinsville.
3. Some Problems of Catarrhal Deafness, Dr. V. A. Magenheimer, Mooresville. Discussion opened by Dr. W. DeWolfe Wales, Indianapolis.
4. A Demonstration of Surgical Pathology, Dr. W. D. Gatch, Indianapolis. General discussion.
5. Some Difficulties of Sanitation in Small Towns, Dr. Ernest Cooper, Plainfield. Discussion opened by Dr. Will Shimer, Indianapolis.

6. Paralytic Feet. Callie Operation, Dr. E. B. Mumford, Indianapolis. Discussion opened by Dr. M. N. Hadley, Indianapolis.

7. Demonstration of Cases, Dr. C. P. Emerson, Indianapolis. (a) Multiple Osteophytes, Three Cases, (b) Yeast Infection, Glandular, (c) Chronic Malaria, (d) Local Infection at the Root of the Teeth. General discussion.

The evening program was as follows:

1. Remarks by the Councilor, Dr. W. B. Kitchen, Indianapolis.

2. Mr. F. E. Schortemeir, the Executive Secretary of the Indiana State Medical Association, made a short talk dealing with matters relating to the duties of his office.

3. Methods of Determining the Acidity of the Blood, with Demonstrations, Dr. B. B. Turner, Indianapolis. Discussion opened by Dr. A. C. Kimberlin, Indianapolis.

The officers elected for the coming year are as follows: President, Dr. E. M. Sweet, Martinsville; vice president, Dr. Ralph S. Chappell, Marion Co.; vice president, Dr. V. A. Magenheimer, Morgan Co.; vice president, Dr. Thomas, Hendricks Co.; vice president, Dr. Craig, Johnson Co.; secretary-treasurer, Dr. M. N. Hadley, Indianapolis. Place of meeting, 1917, Hendricks County.

REPORT OF TREASURER FOR 1916

Balance on hand from 1915 meeting.....	\$1.84
Collected from Marion County	\$32.00
Collected from Morgan County	1.50
Collected from Johnson County	1.70
Collected from Hendricks County	2.60
	<hr/> \$37.80
	<hr/> \$39.64

EXPENSES FOR 1916 MEETING

Sentinel Printing Company.....	\$10.25
Stamps	9.00
	<hr/> \$19.25
Balance on hand.....	\$20.39

The above amount collected from counties represents an assessment of 10 cents per member, which was agreed on by all counties in the District in order to furnish funds for running the organization.

JEWETT REED, Secretary-Treasurer.

MUNCIE ACADEMY OF MEDICINE

Meeting of Nov. 10, 1916

Regular meeting of Muncie Academy of Medicine was held at office of Dr. Hollis at Hartford City, Friday evening, Nov. 10, 1916, and was called to order at 8:30 by President U. G. Poland.

Minutes of preceding meeting were read and approved.

Drs. Cory and Buckles, both of Hartford City, were voted into membership.

Dr. Poland announced the following committees for ensuing year: Program: Drs. C. M. Mix, O. E. Spurgeon, H. D. Fair; Library: Drs. C. A. Ball, W. A. Hollis, J. M. Quick; Membership: Drs. I. M. Trent, C. A. Sellers, W. J. Molloy.

Case reports were submitted by Drs. Sellers, Ball and Dewees.

Dr. I. M. Trent read a most interesting paper on the "Complications of Typhoid Fever," in which he

reported a series of 270 cases of typhoid fever, from which he drew the following conclusions:

To the usual list of complications he would add: bed sores, involuntary discharges from bowels, colic, gallstone colic, endocarditis and impaction of rectum. Some of these he thinks occur only as accompanying ailments and not as true complications, while still others occur so very seldom as to make them seem as really freak occurrences. The complications he would mention as being worth considering are as follows: Hemorrhage, perforation, infection of gallbladder, pleurisy, peritonitis, jaundice, thrush, parotiditis, suppurating otitis media, lymphangitis, epistaxis, thrombosis (both arterial and venous), mental enfeeblement or insanity, arthritis, periostitis, abscesses, sudden collapse due to cardiac weakness, excessive tympanitis, hypostatic congestion of lungs, bed sores, involuntary discharge from bowels, colic, gallstone colic, endocarditis and fecal impaction.

He would cut down this list still further and says that the only ones we could really expect are in the order of their importance and seriousness as follows: perforation, peritonitis, hemorrhage, epistaxis, excessive tympanitis, bed sores and fecal impaction.

Dr. Trent also related some of his personal experiences in different cases and reported several extremely interesting cases from his own practice.

Discussion of Dr. Trent's paper was postponed and Academy adjourned to the Blackford Club where a most excellent "Feed" was served at the expense of the Hartford City members of the Academy.

Dr. Trent's paper was discussed after the "Feed" by Drs. Fair, Sellers, Wadsworth and Mix.

The program for the next meeting was announced as follows:

"Dietetics in Typhoid Fever," Dr. Sellers. "Treatment of Typhoid Fever," Dr. Fair.

Drs. Sexauer, Hatchet, Hollis, Sr., Dewees and Davison, all of Hartford City, were visitors at the meeting.

Adjourned.

Meeting of Nov. 17, 1916

Regular meeting of Muncie Academy of Medicine was held at Y. M. C. A. Building, Friday evening, Nov. 17, 1916, and was called to order at 8:30 by President U. G. Poland.

Minutes of preceding meeting were read and approved.

Dr. Sellers reported further on a case which he had reported recently before the Academy.

Dr. Fair moved that next meeting be postponed on account of Lecture Course number which comes same night; seconded and carried.

A highly scientific paper on "Dietetics in Typhoid" was read by Dr. Sellers, in which he states:

That the great loss in weight in typhoid can be prevented to a greater or less degree by well balanced high caloric diet; proteins 70 to 100 gm. backed up by liberal supply of carbohydrates which are the strongest spacers of body protein, and it is on the carbohydrates that we place our strongest reliance to solve the problem of this nitrogenous waste. The fats, on account of their well known tendency to induce digestive and diarrheal disturbances, must be used with this fact in mind. The high calories as follows, is a scientific diet:

A quart of milk affords 640 calories. A quart of cream (16 per cent.) about 1,600 calories. Each egg,

80 calories. Milk sugar 120 calories to the ounce. White bread, home-made, about 1,225 calories to the pound, or about 100 calories to a thick slice of 1¼ ounces. Butter, about 3,600 calories to the pound, or 100 calories to a pat, which is a trifle under ½ ounce.

With such material various combinations may be made. In comparing results obtained by high caloric mixed diets and those obtained under ordinary diet, mortality percentage is 8.7 per cent. in high caloric cases as compared with 16 per cent. in the other group. Convalescence seemed to be distinctly shortened, and the symptoms of toxemia disappeared as a results of giving sufficient food.

Dr. Fair read a very interesting paper on the treatment of typhoid fever in which he reviewed a number of cases which he observed when rendering his services in the Field Hospital of the Fourth Army Corps at Tampa, Fla., 1898, during which time he was brought in contact with 1,100 cases of typhoid fever; and also reviewed about thirty-seven patients which he saw in Muncie during the ten years following.

The cases seen in the Army Hospital were treated with the ice packs. He states that he has seen men brought in with a temperature of 104 F., after a seven to ten-mile ambulance ride in hot sun, stripped, put in a bath tub, and surrounded with cracked ice. In some cases the shock was too great and did more harm than good, while in others this treatment was highly beneficial. Each patient was given six ounces milk and a half ounce whisky every three hours whether he wanted it or not. Each patient was supposed to get a cold bath when his temperature reached 103 F. Opium and lead were given to control diarrhea.

Dr. Fair disagrees with the conclusions of Dr. Trent in that typhoid is a strictly self-limiting disease, for in comparing results in the later thirty-seven cases with the former 1,100, he feels warranted in making the following résumé:

1. Severity of typhoid, and length of course of disease can be greatly modified by proper treatment.

2. A reasonable allowance of food at frequent intervals is a life-saver in more ways than one. A well fed patient will have practically no delirium, and will not feel keenly the debilitating effects of this naturally wasting disease.

3. Hemorrhage from bowels is less likely to occur when intestines contain a quantity of fluid or semi-fluid than when they are empty.

4. Large quantities of milk quickly swallowed is not a suitable diet for patients.

His experience proves that typhoid fever can be shortened from one to six weeks by liberal use of intestinal antiseptics, most effective of which are sulpho-carbolates and echinacea. He is very partial to ice cream, grape juice, buttermilk, apple sauce, orange juice, chocolate for regular diet.

His symptomatic treatment is as follows: dry skin, parched mouth, pulse hard, small and rapid, give aconite. High temperature, muscular twitchings, and nervous excitement: gelsemium. Patients with dull intellect, cool skin and regulated debilitating cold sweats will be greatly benefited with belladonna.

Sharp cutting pain, deep tenderness and involvement of peritoneum call for bryonia. For insomnia give hyoscyamus, passiflora, or cannibus Indica.

The papers were liberally discussed by Drs. Trent, Morrow, Wadsworth, Spurgeon, Hill and Clay Ball.

Adjourned.

Meeting of Dec. 8, 1916

Regular meeting of Muncie Academy of Medicine was held at Y. M. C. A. Building, Friday evening, Dec. 8, 1916, and was called to order at 8:30 by President U. G. Poland.

Minutes of preceding meeting were read and approved.

Dr. Kirklin brought up question of establishing a physician's exchange and a committee consisting of Drs. Kirklin, Spurgeon and C. A. Ball were appointed to investigate this matter.

Dr. Fair read a case report from Cabot and also read a communication from Massachusetts General Hospital in reference to subscription of the Clinical Records of this hospital.

Dr. Mix gave a short report of his recent trip to Mayo Clinic and of his visit with Dr. Sippy of Chicago.

It was moved to postpone next meeting on account of Delaware County Medical Banquet.

Program for the next meeting was announced: Quiz: The Anatomy of the Stomach. Paper, Dr. Sellars: The Clinical Diagnosis and Classification of Gastric Phenomena.

B. R. KIRKLIN, Secretary.

FORT WAYNE MEDICAL SOCIETY

Meeting of Jan. 2, 1917, called to order in Assembly Room of Courthouse by President Beall at 8:45, with sixteen members present.

Dr. McOscar reported a case of puerperal streptococemia treated by intravenous injection of magnesium sulphate, 1 per cent. solution. Very prompt and complete recovery. This is Dr. McOscar's third case so treated. Discussed by Drs. B. Sweringen, Morgan, Porter, Porter, Jr.

The paper of the evening, "Surgical Aspects of Kidney Disease," was read by Dr. Porter.

Abstract.—To a surgeon contemplating operation on a patient condition of kidneys is of paramount importance. Both the degree and character of impairment should be determined. It should be remembered that one has five times as much kidney tissue as is needed for ordinary purposes. Surgeon should not insist on too near an approach to normal. A given impairment may be due to structural changes, to inhibition or a combination. Structural changes may result from intrinsic or extrinsic causes. Among the extrinsic causes enlarged prostate, and obstruction of the bile ducts are most important. Disease of one kidney may inhibit action of its healthy mate. In the interest of patient surgeon may be forced to operate on substandard risks for the purpose of relieving thereby the cause of the kidney disturbance. The simple drainage of the gallbladder under local anesthesia may relieve the kidney condition so that later a curative operation may be done. The effect of an injury to one kidney on its fellow as demonstrated by Falcome is a subject worthy of further investigation. Discussed by Drs. Sweringen, Porter, Jr., Weaver and McOscar.

Applications for membership of Drs. J. R. Adams and P. E. Shortt were read and referred to Board of Censors.

Announcement of next meeting and adjournment.

Meeting of Jan. 9, 1917

Meeting of Jan. 9, 1917, called to order in Assembly Room of Courthouse by President Beall. Twenty-seven members present.

Dr. E. J. McOscar asked whether air embolism could kill immediately. Dr. Budd Sweringen cited work of Hare who found that an enormous amount of air could be injected in the blood stream in dogs without producing death.

Dr. Bruggeman: There are authentic records of death from air embolism.

Dr. Porter reported a case of tetanus showing first symptoms fourteen days after cautery removal of recurrent carcinoma of the face in which only two or three catgut ligatures were used and which was left open and dressed daily with sterile vaselin. On the fourteenth day a slight trismus with muscular twitchings of neck and some difficulty of deglutition were manifested, and the stiffness of back increased and laryngeal convulsions ensued. General convulsive seizures never violent. Laryngeal spasm nearly proved fatal on one occasion. Patient received 5,000 units of antitetanic serum intraspinously on fourth day and again on sixth day. Also received some hypodermic injections of lobelia. Gradual recovery ensued and patient was discharged from hospital two months after operation. Discussed by Drs. McOscar, Bruggeman, Porter, Jr., and Beall.

Dr. K. K. Wheelock read a most interesting paper on the authenticity of Shakespeare.

The following bills were allowed: postage, \$26.50; stenography, \$14.00; printing, \$11.05; banquet deficit, \$7.30.

The secretary was instructed to inform executive secretary of state society that society opposed any legislation that would lower medical requirements in this state and further that the society endorsed the recommendation of the codification committee relative to requirements in the case of chiropractors and Christian Science practitioners. It was further suggested that members use their personal influence in upholding the standard of the medical requirements in this state.

Report of treasurer was read and referred to auditing committee and is here appended.

Jan. 1, 1916, balance on hand.....	\$136.22
Received from secretary.....	358.00
Total	\$494.22

EXPENSES

Vouchers 1 to 17 inclusive.....	\$348.37
Balance on hand.....	\$145.85
Balance in indigent fund.....	\$553.64

MILES F. PORTER, JR., Secretary.

ELKHART COUNTY

Meeting of Nov. 2, 1916

Call to order at 2:45 by secretary in Odd Fellows Hall, New Paris. Dr. J. A. Snapp elected temporary chairman. Minutes October meeting read and approved. Thirty-six members present.

Communication from Vanderburgh County Medical society concerning Compensation Law read by secretary. After some discussion, motion was made and carried that matter be laid on table.

Réport of committee by Dr. J. C. Fleming, chairman, on Thirteenth District Medical Society meeting,

Elkhart, November 14. Motion made by Dr. Snapp and carried that expenses incidental to District meeting be borne by county society.

Report by Dr. Becknell, chairman of Republican committee on legislation. Report of Dr. Frink of same committee. No report by Democratic committee.

Report on annual meeting by Dr. C. F. Fleming, chairman.

Secretary instructed by vote of society to send for pamphlets concerning medical frauds.

Case showing swelling of femur demonstrated by Dr. E. D. Stuckman. History given and diagnosis asked for.

Paper, "Hand Infections," Dr. L. A. Elliott, Elkhart. Essayist described the surgical anatomy of the hand in detail, being convinced that many hands suffer deformity and permanent loss of function because of wrong diagnosis and treatment when first seen.

Staphylococcus, streptococcus, gonococcus and gas bacillus given due credit in causing hand infection.

Spaces on palmar surface: (1) thenar, (2) hypothenar and (3) middle palmar. Space on dorsum: (1) subcutaneous and (2) subaponeurotic.

The webb space.

Tendon sheaths: (1) radial bursae, (2) ulnar bursae and connecting channels. Charts showing various spaces and sheaths demonstrated.

Felon, paronychia, lymphangitis, tenosynovitis, all described minutely.

Preventive treatment now used in most all factories in Chicago with first-aid kit of tincture iodine, sterile gauze and adhesive has resulted in a 50 per cent. decrease in the number of infections. The German army surgeons use iodine, while the Allies' surgeons use Dakin's solution.

Treatment: The hand should be immobilized and elevated. Hot dressings, boric acid or potassium permanganate whose therapeutic value consists in moist heat chiefly. These should not be continued too long. Bier's hyperemia is applicable in some cases. Free elimination from bowels and the so-called blood antiseptics. After an infection has become localized it should be opened and drained, the field of operation having been rendered bloodless by a Martin bandage on arm and the patient anesthetized. Dr. Elliott detailed a procedure followed in opening each of the spaces mentioned above. Gutta-percha is preferred to gauze or rubber tubing for efficient drainage.

Complications: Osteomyelitis, suppurative arthritis, tendon necrosis with sinus formation, trophic changes, and atrophy of the muscles, long continued edema, and various contractures.

The location of the greatest swelling does not indicate the location of the pus; the site of greatest tenderness is of most importance in the location of pus. Never amputate as a primary procedure but establish free drainage by large wide-open incisions.

Paper, "Selective Metastatic Infections," Dr. F. M. Freeman, Goshen. The phenomenon of selective infection depends on the organism involved, the environment and the reaction of the host. The important pathogenic bacteria concerned comprise the various strains of the staphylococcus-streptococcus-pneumococcus group, less frequently the gonococcus, *B. coli communis* and *B. aerogenes capsulatus*. Endocarditis, rheumatic fever, arthritis, neuritis, myositis, nephritis, appendicitis, cholecystitis, and ulcer of the stomach may result from a metastasis of organisms from a chronic focus. Teeth and tonsils, middle ear

and sinuses, ovaries and tubes, seminal vesicles and prostate, gallbladder and appendix and joints may harbor the offending organism. Such local infections not always the primary cause of systemic disease but often are the result, adjuvants, however, which either prevent recovery or prolong ill health. This group of bacteria shows same tissue affinity when injected into lower animals. Avirulent strains may be made virulent by successive animal passage and virulent may be made less virulent by growth in vitro. Many diseases differing widely in symptomatology may be due to strains of bacteria of the same or closely related species possessing different localizing or infecting powers. Specific affinity can also be altered by changing oxygen tension. The crowning of imperfectly filled teeth especially where infected root canals have been neglected and the incomplete removal of diseased tonsils which leaves infected crypts covered with scar tissue furnish ideal thriving conditions for anaerobic strains. Conversely there are strains which grow best in a medium of high oxygen tension which show an affinity for tissues supplied with an abundance of blood, such as heart muscle, pancreas, and other glandular tissue. These principles include in their scope various diseases of nervous tissues which were cured by removal of the infecting focus.

Most infections gain entrance to the system by way of three great tracts: the alimentary, the respiratory and the genito-urinary. Infections of male genito-urinary tract emphasized.

The focus of infection when found should be looked on not only as a portal of entrance but also as a place where a carrying affinity may be acquired. This helps to explain why better results are usually obtained from the use of autogenous vaccines. Vaccines of the predominating strains furnish the logical remedy but must be used guardedly.

DISCUSSION

DR. P. B. WORK, Elkhart: Care of insignificant wounds very important. Public should be taught value of iodine and worthlessness of hydrogen peroxide. Advocates dry dressing for infection before exudate or pus forms, incision and wet dressing after pus has formed. Wet dressing should be one that does not coagulate serum. First apply hypotonic and then hypertonic solutions. Referred to Rosenow's demonstration at last meeting of the American Medical Association. Rosenow proved that organisms do cause same lesions in animal that existed in the human being. Vaccines are erratic and do not always give desired results. Proteins when injected into blood are broken up into peptones and amino-acids; when injected subcutaneously are broken up into poisonous and nonpoisonous parts. Diffusible and nondiffusible. Depends on character of focus itself as to results from vaccines. (1) Through wall or barrier surrounding infection will pass the poisonous or diffusible part. To a closed, densely walled-off infection, no remedial vaccine will gain admission. Only remedy there is to remove focus. (2) Another class, wall is less dense, antibodies may pass through wall and it is possible to get some amelioration of symptoms by vaccine treatment. (3) There is no wall and antibodies may gain access easily. Case 1.—Man who had recurrent attacks of appendicitis, tonsils were removed and he has been absolutely free for several years. Case 2.—Pyorrhea in woman who showed symptoms of pulmonary tuberculosis, teeth

not decayed. Pyorrhea was cured and all symptoms simulating tuberculosis infection were relieved. Case 3.—Sciatica in man who was cured following injection of typhoid vaccine intravenously—example of therapeutic nonspecific protein.

DR. I. J. BECKNELL, Goshen: Uses properly adjusted bandage or adhesive strips inclosing wounds of the hands rather than sutures. To redress a clean and healthy wound at frequent intervals invites infection. Uses antiseptic powders, gauze, and bandage. Believes granulations act as barrier to infection and should not be disturbed. Hot boric acid dressing in lymphangitis. Uses irrigation by gravity.

DR. E. E. ASH, Goshen: Wrong diagnosis because source of infection is not found.

DR. J. C. FLEMING, Elkhart: Obligate anaerobes tetanus and gas bacillus infections make it desirable to treat all open, noninfected wounds with iodine and exposure to air. Case cited—gas bacillus infection in arm following corn-shredder wounds of hand. Died soon after admission to hospital. Treatment suggested, burning off arm with plumber's blow flame and injection of oxygen into remaining tissues of shoulder. Still there are plenty of cases where results are negligible or none at all.

DR. G. W. KIRBY, Goshen: Education of laity in regard to infection of wounds. Open air treatment advocated.

DR. C. F. FLEMING, Elkhart: In saturating wounds with iodine and covering closely, frequently pain and irritation due to iodine and covering. Abscesses of hand cannot be opened too early.

DR. W. A. STAUFFER, Elkhart: Opposes carbolic acid as a wet dressing.

DR. J. A. WORK, SR., Elkhart: Cited own case of hand infection cured by free incision.

DR. C. W. HAYWOOD, Elkhart: Case 1.—Young Jew with a minor hand infection insisted on having doctor dress it every day until healed. Case 2.—Woman who had neglected a small scratch on ring finger—infection of whole hand followed by systemic infection finally cured after hospital care. Prompt and proper care of infected hands important.

DR. F. M. FREEMAN, closing: Pendulum of enthusiasm for use of vaccines in infections is swinging too far. Too many stock vaccines used in acute colds and similar conditions.

Adjourned.

Ladies during the afternoon were the guests of Mrs. E. D. Stuckman. Dinner was served at M. E. Church at 5:30.

JAMES A. WORK, JR., Secretary.

JOHNSON COUNTY

The Johnson County Medical Society, at their January meeting, elected the following officers to serve the ensuing year: President, Dr. D. L. Phipps; vice president, Dr. O. E. Provines; secretary-treasurer, Dr. D. R. Saunders.

On motion, the chair appointed a committee on legislation as follows: Drs. L. L. Whitesides, O. A. Provines and H. J. Hall.

The society voted in favor of an amendment to the Workmen's Compensation Law.

Adjourned. D. R. SAUNDERS, Secretary.

LAKE COUNTY

Lake County Medical Society met in regular session at Gary Public Library, Thursday, January 11, at 8 p. m., Dr. Miltimore presiding. Attendance, 29.

Applications for membership received from Drs. M. Buschbaum and S. Farres of Gary, and C. G. Mackey of Whiting. On favorable report of censors, applicants were duly elected to membership.

Communications from executive secretary concerning proposed medical legislation read and generally discussed.

Dr. H. B. Culver of Chicago presented a paper on "The Treatment of Chronic Gonorrhea by the Intravenous Injection of Specific and Nonspecific Substances."

Dr. G. P. Mathers of Chicago discussed the "Etiology of Influenza and LaGrippe."

These two papers were freely discussed by several members.

Adjourned.

E. M. SHANKLIN, Secretary.

ST. JOSEPH COUNTY

At the meeting of the St. Joseph County Medical Society held on the evening of Jan. 23, 1917, Dr. Fox of the U. S. Public Health Service gave a talk on the subject "The Plague, the Rat and the Flea," illustrated by lantern slides. The bubonic form of plague was mainly discussed. He said that bubonic plague was primarily a disease of rodents (commonly rats) and was transmitted from rodent to rodent and from rodent to man through the agency of the flea. After giving the symptomatology, pathology and the bacteriology of the disease he gave a brief talk on the anatomy of the flea with special reference to the mechanism involved when a flea bites its host and to the manner in which the infected material is inoculated. He said that to eradicate the disease it was necessary to carry on a ruthless war against the rat by trapping, poisoning and the elimination of rat breeding and rat feeding centers and that the only hope for permanent results was to build the rat out of existence by proper rat proofing.

R. B. DUGDALE, Secretary.

TIPPECANOE COUNTY

Tippecanoe County Medical Society met in regular session January 23, with President Driscoll in the chair.

The resolution to the state legislative committee relative to defeating the chiropractic bill was unanimously adopted. Secretary was instructed to communicate further with regard to insignia for physicians' automobiles. Senator A. O. Reser's communication pertaining to his favorable stand with the physicians on the chiropractic bill was read and secretary instructed to write a letter thanking Mr. Reser for his decision.

Dr. A. C. Kimberlin of Indianapolis was present and spoke of the value of subjects relative to medicine as helpful to the physician, and cited Boston and Harvard University as an example of what is being done along such line of thought. Dr. Kimberlin was in Lafayette in consultation over the case of Dr. G. P. Levering who was in a serious condition from pneumonia.

The paper of the evening was given by Dr. A. C. Arnett, his subject being "The Organization of the Medical Department of the U. S. Army." He spoke

of the wonderful work being done in way of surgery, sanitation and hygiene, and organizing necessary hospitals for service. He also spoke of the poor equipment furnished the surgeon in the way of instruments. Dr. Arnett recently returned from the Mexican border.

Dr. Kimberlin made note of the absence of so many of the younger physicians from this meeting. A word to the wise is sufficient. The cooperation of the younger physicians will mean much to the physicians as well as the society. A splendid program has been arranged for the year.

Adjourned. J. C. BURKLE, Secretary, pro tem.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1916, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

FORMIN TABLETS, 5 GRAINS.—Each tablet contains 5 grains of formin (see New and Nonofficial Remedies, 1916, p. 138). Merck and Co., New York.

FORMIN TABLETS, 7½ GRAINS.—Each tablet contains 7½ grains of formin (see New and Nonofficial Remedies, 1916, p. 138). Merck and Co., New York.

VERONAL TABLETS, 5 GRAINS.—Each tablet contains 5 grains of veronal (see New and Nonofficial Remedies, 1916, p. 92). Merck and Co., New York (*Jour. A. M. A.*, Jan. 6, 1917, p. 35).

UREASE.—An enzyme found in certain beans, fungi and micro-organisms which, in the presence of water, converts urea into ammonium carbonate. It is used in the determination of urea in the urine, blood and other body fluids, either by determining the increase in alkalinity of the fluid to which it is added, or else the ammonia produced by it in the fluid is removed and estimated.

UREASE-SQUIBB.—A standardized preparation of urease obtained from the jack bean. It is supplied in the form of powder and tablets containing 0.1 Gm. E. R. Squibb and Sons, New York.

NEUTRAL SOLUTION OF CHLORINATED SODA.—Solution Chlorinated Soda, Dakin.—Solution Chlorinated Soda, Carrel-Dakin.—A chlorinated soda solution, containing 0.43 to 0.48 per cent. of available chlorine, free from caustic alkali. It is prepared by treating a suspension of chlorinated lime in water with definite amounts of sodium carbonate and sodium bicarbonate and adjusting the separated clear liquid to the required content of available chlorine. The solution is not reddened by phenolphthalein. It must be protected from light. The solution has been used for the irrigation of wounds, especially infected war wounds.

THEOBROMINE-MERCK.—A brand complying with the standards for theobromine-N. N. R. Merck and Co., New York.

BARIUM SULPHATE, P. W. R. FOR X-RAY DIAGNOSIS.—A brand complying with the standards for barium sulphate for Roentgen-ray work-N. N. R. Powers-Weightman-Rosengarten Co., Philadelphia.

BARIUM SULPHATE, MERCK FOR X-RAY DIAGNOSIS.—A brand complying with the standards for barium sulphate for Roentgen-ray work-N. N. R. Merck and Company, New York (*Jour. A. M. A.*, Jan. 13, 1917, p. 121).

ACETYSALICYLIC ACID.—Acidum acetylsalicylicum. Aspirin. The acetyl derivative of salicylic acid. Dosage: 0.3 to 1.0 Gm., repeated once in three hours until symptoms of salicylism are noted. It may be dispensed as powders (in wax paper), wafers or capsules.

IOCAMFEN.—A liquid obtained by the interaction of iodine 10 parts, phenol 20 parts, and camphor 70 parts, containing about 7.25 per cent. free iodine. Iocamfen is said to have the antiseptic and germicidal properties of iodine and also the analgesic, stimulating and antiphlogistic properties of camphor and phenol. It is used in dressing wounds, etc. Iocamfen is also supplied as Iocamfen Ampules, containing 20 minims iocamfen. Schering and Glatz, New York (*Jour. A. M. A.*, Jan. 20, 1917, p. 199).

PROPAGANDA FOR REFORM

THE J. B. L. CASCADE TREATMENT.—The "treatment" is exploited by Charles A. Tyrrell, New York City. It consists in the self-administration of rectal anemas by means of a device, the J. B. L. ("Joy-Beauty-Life") Cascade. The "complete treatment" includes a stick of Tyrrell's "famous Rectal Soap" and a box of the "Celebrated J. B. L. Antiseptic Tonic." The "tonic" was analyzed in the A. M. A. Chemical Laboratory and found to be a mixture of sodium chloride and impure borax, colored and perfumed. The laboratory concluded that a preparation having all the "antiseptic" and "tonic" properties of J. B. L. Antiseptic Tonic can be made by mixing 2.8 ounces common salt with 1.2 ounce powdered borax (*Jour. A. M. A.*, Jan. 6, 1917, p. 50).

TOXICITY OF SALVARSAN AND NEOSALVARSAN.—Claude L. Shields, M.D., Salt Lake City, reports that out of the last twenty-three injections of neosalvarsan four cases exhibited severe poisoning and one resulted in death. He reports the experience of other physicians of severe toxic symptoms from the use of recent shipments of salvarsan and neosalvarsan (*Jour. A. M. A.*, Jan. 6, 1917, p. 53).

Q-BAN HAIR COLOR RESTORER.—Untoward effects from the use of Q-Ban Hair Color Restorer are reported. The Connecticut Agricultural Experiment Station reported the "restorer" to be a perfumed, alcohol-glycerin solution of 1.68 Gm. per 100 Cc. of lead acetate, containing 3.08 Gm. of free sulphur in suspension. The Connecticut report states: It is simply one of the many familiar lead acetate-sulphur preparations, and its use is by no means free from danger (*Jour. A. M. A.*, Jan. 6, 1917, p. 54).

THE SEARCH FOR THE IDEAL ANTISEPTIC.—R. A. Lambert has followed the effect of the same chemical agent on bacteria and tissue cells growing together in vitro. He finds that the growth of tissue cells is more easily affected by potassium cyanide, phenol, tricresol, hydrogen peroxide and alcohol than was the growth of bacteria. Iodine stands out as the one chemical tested to which tissue cells were found more resistant than were staphylococci. A good growth of cells was seen after exposure to a 1 in 2,000 solution of iodine for an hour—a strength sufficient to sterilize the tissue completely in most instances. Lambert points out that the power of iodine to dissolve fibrin may be an objection to its use as an antiseptic wound dressing (*Jour. A. M. A.*, Jan. 6, 1917, p. 40).

IRON CITRATE, GREEN.—H. K. Mulford Company and E. R. Squibb and Sons submitted to the Council on Pharmacy and Chemistry ampules containing solutions of iron citrate, green. It thus became necessary for the Council to consider the eligibility of iron citrate, green itself for admission to New and Nonofficial Remedies. As the rules of the Council provide that non-essential modifications of official or nonproprietary preparations will not be recognized, the above named firms were asked to state what ad-



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vantage, if any, the so-called iron citrate, green has over the official iron and ammonium citrate. Inasmuch as no evidence was presented to show that iron citrate, green has any advantage over the well-known iron and ammonium citrate, the Council held that iron citrate, green and with it the dosage forms, were ineligible to New and Nonofficial Remedies. Advised of this decision, the Mulford Company replied that in the present case it felt bound to supply the existing demand. Squibb and Sons replied that, to give the Council its support in this matter, the sale of iron citrate, green and ampules thereof would be discontinued (*Jour. A. M. A.*, Jan. 13, 1917, p. 135).

MORE MISBRANDED NOSTRUMS.—Chiefly because of unwarranted therapeutic claims, the following "patent medicines" were found misbranded under the Federal Food and Drugs Act: Goff's Cough Syrup, a syrup containing some vegetable extractive and traces of iron, iodids, antimony and alkaloids.—Goff's Herb Bitters, a water-alcohol solution of aloes, sugar and alkaline carbonate flavored with peppermint.—Dander-Off, an alkaline solution of borax and white arsenic colored with coal-tar dye.—Tu-Ber-Ku, a tuberculosis cure containing 20 per cent. alcohol.—Electrozone, claimed to contain or to liberate ozone.—Orange Blossom Female Suppositories, containing boric acid, aluminum salt, sulphate, potassium salt, sodium salt, starch and petrolatum.—Dr. Simpson's Vegetable Compound, essentially an alcohol-water solution of potassium iodid with a small amount of vegetable extractive in which podophyllum, licorice and gentian were indicated.—Weller's Stone Root and Gin, containing 37.5 per cent. alcohol (*Jour. A. M. A.*, Jan. 13, 1917, p. 135).

ACETYSALICYLIC ACID, NOT ASPIRIN.—While Aspirin-Bayer has been omitted from New and Nonofficial Remedies, the product is retained under its scientific name, acetylsalicylic acid, and standards are

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provided to ensure the reliability of the market product. The Aspirin patent expires in February, 1917, and after this time other manufacturers may make and sell the product. One firm's brand, that of the Powers-Weightman-Rosengarten Co., has been accepted for New and Nonofficial Remedies, 1917. Hereafter physicians, when prescribing the compound, should use the scientific name "acetylsalicylic acid" (*Jour. A. M. A.*, Jan. 20, 1917, p. 201).

ASPIRIN-BAYER OMITTED FROM N. N. R.—Aspirin-Bayer is advertised to the public, indirectly by means of "vest-pocket" boxes bearing the name "Aspirin" permanently affixed, and directly by means of extensive newspaper advertising. Inasmuch as this advertising propaganda is an infringement of the rules of the Council and is against the interests of public health, the Council voted to omit Aspirin-Bayer from New and Nonofficial Remedies (*Jour. A. M. A.*, Jan. 20, 1917, p. 213).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been declared misbranded under the U. S. Food and Drugs Act, chiefly because unwarranted curative claims were made for them: Dr. Thatcher's Liver and Blood Syrup, claimed to cure all liver complaints and many other ailments.—Black's Pulmonic Syrup, a water-alcohol solution of ichthyol, glycerin and sugar.—Walker's Pain Destroyer, an alcoholic solution of oil of mustard, chloroform, opium and collodion.—Musterole, a mixture of lard or some similar material with oil of mustard, menthol and camphor.—Snyder's Bitters, claimed to eradicate scrofulous humors, syphilitic affections, cancerous humors and many other ailments.—"5 Drops," a mixture of eucalyptol (or a eucalyptol-containing oil), camphor, safrol, terpineol and eugenol (or an oil containing those ingredients, such as camphor oil).—Dr. Stuart's Specific Drops, a mixture of camphor, alcohol, mercuric iodid and turpentine (*Jour. A. M. A.*, Jan. 20, 1917, pp. 214-215).

PIL. CASCARA COMPOUND-ROBINS (A. H. Robins Company, Richmond, Va.). The Council on Pharmacy and Chemistry reports that Pil. Cascara Compound-Robins is an example of the innumerable mixtures of well-known drugs having nothing in the way of originality or of special therapeutic value to recommend them. The claim that the pills contain no belladonna when they admittedly contain hyoscyamus is, in view of the similar action of these two drugs, a manifestation of ignorance on the part of the manufacturer or an effort to impose on the medical profession. The promotion of this mixture as "an ideal aid to any remedial agent when a mild, medium or strong alimentary stimulant is needed" is a slur on the intelligence of physicians. The Council finds Pil. Cascara Compound-Robins not acceptable for New and Nonofficial Remedies (*Jour. A. M. A.*, Jan. 27, 1917, p. 303).

CASTA-FLORA.—The Council on Pharmacy and Chemistry reports that Casta-Flora, put out by the Wm. S. Merrell Chemical Co., is one of those complex preparations which are offered to the medical profession with plausible arguments in support of the claims made. The Council finds the claims made for this mixture of drugs—which is said to contain or represent chestnut leaves, passion-flower, gelsemium, elecampane, "iodized lime," menthol and yerba santa—and for the individual ingredients thereof, extravagant and misleading. Even if the ingredients, or certain of them, were useful in the treatment of those conditions for which Casta-Flora is recommended, no one could possibly force the effects in any given case from this jumble of drugs. The Council holds that the prescribing of such mixtures, the action of which cannot be foreseen, is plain charlatanism and declares Casta-Flora inadmissible to New and Nonofficial Remedies (*Jour. A. M. A.*, Jan. 27, 1917, p. 303).

BOOK REVIEWS

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. December, 1916, Vol. V, No. 6. W. B. Saunders Company, Philadelphia and London.

To those who have been following these clinics this volume will be one of special significance and value, for it is the last one of these clinics to be published. The first thirty-five pages contain words In Memoriam by Murphy's most intimate colleagues, and an account of his last illness. Even the necropsy findings are recorded. Then follow 150 pages of clinical material such as is well known to every reader of these clinics.

A list of the writings of John B. Murphy is given, as well as the index to Volume V.

OBSTETRICS. Volume VII of the Practical Medicine Series for 1916. Edited by Joseph B. DeLee, A.M., M.D., Professor of Obstetrics, Northwestern University Medical School. With the collaboration of Herbert M. Stowe, M.D., Assistant Professor of Obstetrics, Northwestern University Medical School; Attending Gynecologist to Cook County Hospital. Cloth, \$1.35. Price of series of ten volumes, \$10.00. The Year Book Publishers, Chicago.

The table of contents in this volume is made up of five parts. Part I embraces the review of the subject of pregnancy; Part II, that of labor; Part III, that of the puerperium; Part IV, that of the newborn, and Part V, that of obstetrics in general.

Physicians who are interested in this field of practice and desire to follow the course of its progress and development from year to year will find this volume again one of the best for that purpose.

MATERIA MEDICA AND THERAPEUTICS. Volume VIII of the Practical Medicine Series for 1916. Edited by George F. Butler, Ph.G., A.M., M.D., Emeritus Professor of Therapeutics, Chicago College of Medicine and Surgery. Preventive Medicine. Edited by William A. Evans, M.S., M.D., LL.D., Ph.D., Professor of Preventive Medicine, Northwestern University Medical School. Cloth, \$1.50. Price of Series of ten volumes, \$10.00. The Year Book Publishers, Chicago.

A little more than half of this volume is taken up with the review of materia medica and therapeutics, and the rest with the review of preventive medicine. In the former are given the new developments in the use of all therapeutic substances, including drugs, organ extracts, vaccines and serums, electricity, Roentgen rays, radium and radio-active substances. In the latter the progress made during the year in the domain of prevention of disease is recorded quite fully and splendidly.

BLOOD PRESSURE. Its Clinical Applications. By George William Norris, A.B., M.D., Assistant Professor of Medicine in the University of Pennsylvania; Visiting Physician to the Pennsylvania Hospital; Assistant Visiting Physician to the University Hospital; Fellow of the College of Physicians of Philadelphia; Member of the Association of American Physicians, etc. Second edition, revised and enlarged. Illustrated with 102 engravings and 1 colored plate. Lea & Febiger, Philadelphia and New York, 1916.

The literature on blood pressure is now voluminous. Much of it is a repetition of what is already known, and the busy physician requires a summary of the blood pressure data as it pertains to everyday work, and Dr. Norris has accomplished this result in a manner that is appreciated by the progressive student of medicine. What the average reader desires is a condensed résumé on the subject of blood pressure as it pertains to clinical conditions, and nothing fills the want better than this author's work.

A MANUAL OF OTOTOLOGY. For Students and Practitioners. By Charles Edwin Perkins, M.D., F.A.C.S., Professor of Clinical Otology in New York University and Bellevue Hospital Medical College; Associate Aural Surgeon to St. Luke's Hospital; Assistant Aural Surgeon, New York Eye and Ear Infirmary; Fellow American Otological Society, New York Otological Society, New York Academy of Medicine, etc. 12mo, 445 pages, with 120 engravings. Cloth, \$3.00 net.

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subject of otology in anything like an understandable manner in a textbook that is small and convenient in size. Then again, so many advances have been made in methods of diagnosis, particularly diseases of the internal ear, that a really up-to-date textbook is welcomed by the medical profession. The author of this textbook seems to have accomplished his purpose of covering the subject in a concise and clear manner, and the book should be welcomed by students and general practitioners. The chapters on the examination of patients, and especially that on the functional tests, are especially noteworthy for the thoroughness and clearness with which the subjects have been presented. Intracranial complications are given the importance deserved, and in fact the entire manual represents the latest knowledge of the subject of otology given in a practical manner. We can heartily recommend the work for the purpose that it is intended.

THE PATHOLOGY AND DIFFERENTIAL DIAGNOSES OF INFECTIOUS DISEASES OF ANIMALS. Prepared for students and practitioners of Veterinary Medicine. By Veranus Alva Moore, B.S., M.D., M.V.D., Professor of Comparative Pathology, Bacteriology and Meat Inspection, New York State Veterinary College at Cornell University, and Dean of the College. Fourth edition, revised and enlarged. With 120 illustrations. Cloth, \$4.00. The Macmillan Company, 66 Fifth Avenue, New York, 1916.

In the eight years that have elapsed since the appearance of the third edition of this work a great deal of progress has been made in the field of veterinary medicine just as in medicine in general. To

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bring the work up to date and make it meet the needs of students and practitioners at present, this new edition is presented.

The book has been carefully revised, much of it has been rewritten, and numerous additions have been made. Two appendices have been added, one on the requirements for interstate shipment of live stock, and one on the federal regulation for the veterinary inspection of meat.

The presentation of the subject matter and the grouping of diseases on the basis of etiology is given here as in the previous editions of this book. The purpose of the author has been to lay special stress on those diseases which veterinarians in this country are liable to encounter, and to give briefly the characteristics of the others. In this purpose he has succeeded admirably.

There are a large number of illustrations, all of them clear and quite striking, and most of them unusually good.

Such a book deserves a high place in the literature of veterinary medicine.

CONSTIPATION, OBSTIPATION AND INTESTINAL STASIS. By Samuel Goodwin Gant, M.D., LL.D., Professor of Diseases of the Colon, Sigmoid Flexure, Rectum and Anus in the New York Post-Graduate Medical School and Hospital. Second edition, enlarged. Octavo of 584 pages, with 259 illustrations. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

The first edition of this book (published in 1909) met with a very popular welcome by the profession. For this the author expresses his thanks in this edition.

The subjects treated in this book are such that every practicing physician wants and has to know all that there is to be known about them. Therefore a book presented by one who has had such vast experience and who has helped to develop this special field as much as this author most certainly would meet with popular favor.

This book fills a real need. In it the author has given the knowledge one must get if one wants to have the present-day ideas as to the significance of constipation, obstipation and intestinal stasis and how to proceed to relieve these conditions. Every aspect of these conditions is given the attention it should have. Treatment, in particular, has been given ample consideration.

In this edition many changes have been made. Seven more chapters have been added, also many illustrations and whatever other additions that were necessary to make the volume complete and fully up to date.

SYPHILIS. By Loyd Thompson, Ph.B., M.D., Physician to the Syphilis Clinic, Government Free Bath House; Visiting Urologist to St. Joseph's Hospital; Consulting Pathologist to the Leo N. Levy Memorial Hospital, Hot Springs, Arkansas; First Lieutenant, Medical Reserve Corps, United States Army; Member of the American Urological Association and the American Association of Immunologists. Octavo, 415 pages, with 77 engravings and 7 colored plates. Cloth, \$4.25 net. Lea & Febiger, Publishers, Philadelphia and New York, 1916.

This author has had the opportunity of obtaining a vast experience with syphilis in all its manifestations, and already has written a great deal on this subject. Therefore, a new book on syphilis by him ought to be a contribution that should be greatly appreciated by practitioners.

The author states that he has aimed to present the subject "in as practical a manner as possible." He has succeeded very well. The special emphasis he has laid on diagnosis and treatment is, perhaps, the feature that adds more than anything else to the value of the book.

It must be said that although nothing really new has been brought out by the author he has summed up what is already known about syphilis and presented it in a manner so clear, concise, and practical that the work ought to be not only of interest but of real value to the practitioner.

Special mention must be made of the many splendid illustrations. The value of these in enhancing the quality of the work could not be exaggerated.

Attention must be called to a typographical error on page 90, where "sorpiginous" is used for serpiginous.

A TEXTBOOK ON PRACTICAL THERAPEUTICS. With especial reference to the application of remedial measures to diseases and their employment on a rational basis. By Hobard Amory Hare, B.Sc., M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one-time Clinical Professor of Diseases of Children in the University of Pennsylvania. Sixteenth edition, revised and enlarged. Imperial octavo, 1009 pages, with 149 engravings and 17 plates. Cloth, \$4.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1916.

Sixteenth edition! That in itself should be a recommendation, but the author's work has continued to grow in popularity and usefulness because of the skill and accuracy with which it has been done. The physician who desires to be acquainted with the latest and best knowledge concerning the application of remedial measures to diseases, and their employment on a rational basis, is recommended to read and digest Dr. Hare's splendid work. The book has been made eminently practical because superfluous material, so common in medical books, has been eliminated, and the author has attained the desired result of giving readers an everyday working knowledge of practical therapeutics.

Part 1 is devoted to general therapeutic considerations, in which is discussed the modes of actions of drugs, manner of administering them, idiosyncrasies, incompatibilities, classification, prescription writing, etc. Part 2 is devoted to drugs, and in this part has been included the most used drugs with the therapeutics of the same as accepted by leading clinicians. This part takes up nearly 500 pages. Part 3, consisting of over 100 pages, is devoted to remedial measures other than drugs, and helpful information concerning treating the sick. The essential part of Part 4, consisting of over 300 pages, is devoted to the treatment of diseases, and in its preparation the author has had the assistance of such eminent clinicians and teachers as Dr. George E. deSchweinitz, Professor of Ophthalmology in the University of Pennsylvania; Dr. Barton C. Hirst, Professor of Obstetrics in the University of Pennsylvania, and Dr. Edward Martin, Professor of Surgery in the University of Pennsylvania.

It goes without saying that this sixteenth edition has been thoroughly revised and largely rewritten to conform to present-day knowledge. The work is eminently satisfactory for the progressive student and practitioner, and deserves its place as a standard textbook.

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CONTENTS

ORIGINAL ARTICLES

	PAGE		PAGE
Report of Two Cases of Extra-Uterine Pregnancy at or Near Term. Edmund D. Clark, M.D., Indianapolis..	89	Legislative Action on Bills Affecting the Medical Profession	112
Radium Therapy. T. C. Kennedy, M.D., Indianapolis....	105	Editorial Notes	113

EDITORIALS

Intestinal Stasis	111	SOCIETY PROCEEDINGS	
Electrotherapy	111	Minutes of the Annual Meeting of the Indianapolis Medical Society	123
		Muncie Academy of Medicine	127

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

	PAGE	MISCELLANEOUS	PAGE
Fort Wayne Medical Society	128	Deaths	117
Elkhart County Medical Society	129	News Notes and Personals	118
Huntington County Medical Society	130	Correspondence	122
Madison County Medical Society	130	The Truth About Medicines	131
Pulaski County Medical Society	130	Book Reviews	133
Tipton County Medical Society	131		

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ORIGINAL ARTICLES

REPORT OF TWO CASES OF EXTRA-UTERINE PREGNANCY AT OR NEAR TERM*

EDMUND D. CLARK, M.D.
INDIANAPOLIS

CASE 1.—Mrs. P. D., age 28 years. Family history has no bearing on the trouble for which she was admitted to the hospital. *Personal History.* Had the usual diseases of childhood. Began menstruating at the age of 12. Menstruation has always been regular and normal. Married at the age of 16. She has borne two children, eldest 12, youngest 8, both children living and well. Labor normal. One year after the birth of her last child (seven years ago) she became pregnant again. She had a great deal of nausea and vomiting with this pregnancy. Owing to the persistent vomiting became much reduced in weight and strength. At the third month she received a severe fall and miscarried a day or two afterwards. She remained in bed three days and soon recovered her usual health. Nine and one half months before her admission to the hospital she became pregnant for the fourth time. She complained of nausea and a great deal of abdominal pain. Obstinate constipation. Observed fetal movements between the fourth and fifth month. Six weeks before her admission to the hospital movements became very strong and caused her much discomfort. Three weeks before her admission to the hospital she had a gush of fluid from the uterus, she said, "about a cup full," which at the time was thought to be amniotic fluid. She felt no movement afterwards. She was very uncomfortable owing to her size. Complained of nausea and exhaustion. Her temperature became elevated to about 100 degrees.

Physical Examination. Patient emaciated,

skin pale, pulse 125, temperature 101, respiration 25. Heart and lungs normal. The abdomen had the appearance of pregnancy at term. On palpating the abdomen a tumor was found filling the entire abdomen. Upon bimanual examination the uterus was found to be about normal in size, the cervix was dilated and the mucous membrane showed a gray necrosis. There was a foul discharge coming from it. Repeated attempts had been made to bring on labor by dilating the cervix, etc.; this in my judgment was the cause of the infection in the uterus. There were no fetal heart sounds. The fetal heart had been heard a number of times, however, by her family physician but not for about three weeks.

The patient was operated upon Jan. 17, 1911. A long median incision was made which disclosed a large tumor filling the abdomen. The uterus and appendages were not connected with it. The adhesions to the tumor were extensive and had to be tied to control hemorrhage. The intestines were packed away from the tumor with sponges—the fluid was drawn off with a large trocar. The sac was then opened and a full term child, weighing 8 pounds was removed. The placenta was found behind the uterus, attached to the posterior surface of the rectum and sigmoid. Owing to the attachment of the placenta and the infection of the uterus it was removed with the tubes—this made the removal of the placenta easy and safe. After all bleeding points had been stopped the abdomen was closed without draining in the usual manner.

The mother made an uneventful recovery, was discharged from the hospital sixteen days after operation. In a recent letter from the patient she says she is in perfect health.

CASE 2. — *Personal History.* — American, white, age 38. General health always good. Had the usual diseases of childhood. Had typhoid when 34. Menstruation began at 13, was always regular, menstruation lasting seven to nine days with normal amount and no pain. Married at 23. Been pregnant six times. She aborted in the second pregnancy at the second

*Presented before the Indiana State Medical Association at the Fort Wayne Session, September, 1916.

month. All deliveries normal. Four living children. Eldest 8 years of age.

Present Illness.—Period due October 26, 1913, but did not menstruate until week later and then very scant. November flow intermittent and pain was so severe she was confined to the bed most of the time. Menstruated again in December. Did not have much trouble with last menstruation. It lasted three or four days. Did not go to bed. January not so much flow nor pain. Came to hospital February 17. A diagnosis of pregnancy was made in November by Dr. Petersdorff but he was in doubt as to it being normal. Six weeks before coming to the hospital first noticed increase in size of abdomen. Never felt movement.

Operation.—There were many soft adhesions to omentum and intestines. Much free fluid in abdomen, bloody in character. A fetus in the fourth month of gestation was removed. It breathed a few times. Cord was about twelve inches long. The placenta was attached to the upper part of the uterus. The intestines were adherent to the sac by soft, easily broken adhesions. The omentum was adherent and parts of it were removed. The fetus was free in the lower right abdominal cavity. There was a severe hemorrhage at point of attachment of the placenta. This was controlled by bringing the fundus of the uterus to the anterior abdominal wall and attaching it. The right tube and ovary were normal. The patient made an uneventful recovery.

Von Winckel,¹ discussing the reasons for the rarity of true abdominal pregnancy, states that a peritoneal implantation of the ovum, provided it occurs at all, certainly represents an extremely rare exception among the frequent cases of ectopic fixation of the ovum. On the basis of current knowledge concerning the mode and condition of fixation of the ovum, the explanation must no longer be referred to the formerly prevalent assumption that the fertilized ovum requires for its implantation a mucous surface or a special epithelium at the site of the fixation of the ovum, for it is not intelligible why the fixation should not take place just as readily upon a peritoneum which has been prepared by a preceding inflammatory irritation. The extraordinary rarity of true peritoneal gestation is presumably due to the fact that the fertilized ovum is not easily turned aside from its way to the uterus, where it is held by the ciliary current of the tubal epithelium; perhaps also because the ovum does not usually encounter elsewhere than in the tract between the ovary and the uterus the necessary conditions for its nutrition during the period of time between fertilization and that stage of development when the ovum acquires

the capacity for entrance into the maternal tissue.

Winckel emphasizes that the classification of an ectopic pregnancy must be governed by the physiologic connections due to the site of implantation of the ovum, namely, the point of insertion of the placenta, rather than by the later mechanical connections. A true abdominal pregnancy can be assumed only after it has been shown that neither the tube nor the ovary participate in the formation of the placental insertion.

He formerly examined a number of old specimens, described as abdominal pregnancy, and succeeded in showing their tubal origin. He arrived at the same result in a critical review of the available material on extra-uterine pregnancy. Not a single observation was found in which the anatomic proof of a primary peritoneal fixation of the ovum can be regarded as successful. Recent anatomic study of the advanced stages of ectopic gestation has still further undermined the assumption of a peritoneal mode of origin. The secondary development in the free abdominal cavity of a fetus coming from a sac in the adnexa has been found to be still much more common than was formerly supposed. Cases of this class formerly served as the criterion for a true abdominal pregnancy. Moreover, their actual character is not always readily demonstrable, because secondary adhesions of the fetal sac and the placenta with parietal or visceral segments of the peritoneum are apt to give rise to errors concerning the site of the placental insertion. It is probable that in this way one may account, for the most part, for observations, in operations upon the abdominal cavity, concerning an apparently atypical site of the placenta on the intestine, the liver, the region of the spleen or kidney. Such observations certainly do not prove anything against the original development of the pregnancy in one of the uterine adnexa.

Primary abnormal length of the tube, or subsequent tubal elongation in the course of the pregnancy, occasionally permits a considerable displacement of fetal sacs which have originated in the outer segment of the tube, into higher portions of the abdominal cavity. The pregnant tubal segment may become separated, newly developed vascular communications providing the blood supply of the transplanted product of conception. Winckel is more inclined to assume as possible this transplantation of the ovum, together with its soil of attachment, than the transplantation of an ovum which has been completely detached from its original insertion to a new site. Numerous writers, however, regard this as possible, and do not hesitate to explain remarkable findings of the insertion of the ovum at a great distance from the pelvic genital region, as the result of

1. Von Winckel, F., "Handbuch der Geburtshilfe," xi, Part 1, Wiesbaden, 1904, p. 768.

peritoneal re-implantation of ova which were originally imbedded in the tube and which have even passed the first developmental stages.

Furthermore, a primary peritoneal site of the pregnancy may be simulated by free fimbriation, more particularly *graviditas fimbriae ovaricae*, for there is a coarse anatomic resemblance with the condition which would arise through the further development, after actual peritoneal implantation of the ovum in the lateral pelvic region. Careful histologic examination is required for the differentiation, and it is very probable that a series of cases described as true abdominal pregnancies have originated from the *fimbria ovarica*.

Another possible source of error, according to Winckel, is found in the fact that an ovum which reaches the abdominal cavity through rupture of the pregnant uterus may produce the appearance of an original abdominal location, especially when the product of conception has escaped in the undamaged membranes, including the placenta, and when a considerable time has passed between the rupture and the examination of the abdominal contents. It is also possible that, in consequence of the stretching of weak portions of the uterine wall, bulgings may sometimes form, growing, in the course of ordinary gestation, into large diverticula, surrounding the entire ovum and becoming separated from the rest of the organ to such a degree that the demonstration of the uterine origin of the pregnancy becomes possible only after the most careful examination. A misinterpretation of the actual state of affairs will readily lead to the assumption of ectopic pregnancy, more particularly abdominal pregnancy, because the uterine adnexa do not participate in the formation of the sac.

While pointing out the numerous sources of error, Winckel does not absolutely deny the occurrence of the true abdominal form, on the basis of certain findings which can hardly be explained otherwise than by primary peritoneal fixation. The most important of these cases is that of Calabin,² who found in Douglas' space a ruptured fetal sac, with ten weeks' fetus and a placenta on the floor of the sac. A competent anatomic committee decided that the uterine adnexa were entirely unchanged, so as to exclude their participation in the formation of the sac. Several observations of Rein³ concerned advanced pregnancies, with a fetus long since dead. In these cases the placenta was inserted at the uterus, while the tubes and ovaries were unchanged. In a case reported by Morian⁴ in 1894, the skeleton of the fetus was found in a purulent focus, in the vesico-uterine fossa, which had ruptured into the bowel

and through the anterior uterine wall. The tubes were not involved in the structure of the pseudomembranous fetal enclosure. On account of the extensive suppurative changes this case cannot be considered as a positive proof of the existence of primary abdominal pregnancy. Winckel also questions the case of primary peritoneal pregnancy reported by Wittbauer (see Wittbauer's report). In a case of free intraperitoneal hemorrhage Wittbauer found a very young ovum which communicated with the adherent pelvic omentum. The ovum was surrounded by a layer of clotted blood, and nowhere showed a persisting connection of its villi, or their trophoblastic layer, respectively, with the tissue of the omentum. This is contradictory to the usual findings at the insertion of recently detached ova, in early interruptions of ectopic pregnancy, and rather suggestive of secondary agglutination of an ovum expelled from the tube, with the omentum adherent in the region of the abdominal ostium.

Cannaday⁵ found that the statistics of frequency vary widely, according to the count of different observers. About 8 per cent. of all cases of extra-uterine pregnancy are said to be abdominal in character. The diagnosis of abdominal pregnancy is rarely made prior to false labor, for the reason that the physician's attention is rarely called to the case. In the primary abdominal type there may be no disturbance of the menstrual function. False labor may be premature, happening at the seventh or eighth month, but it usually makes its appearance at term, rarely afterwards. At the same time the patient has intermittent pains analogous to the labor pains. The cervix does not become obliterated, but dilates sufficiently for the entrance of one or two fingers. After the decidua is expelled the pain ceases and does not return unless there has been a rupture of the fetal sac. It is nearly always best to approach these pregnancies by a median laparotomy. Complete removal of fetus, membranes and placenta is highly desirable. By reason of dense adhesions, great danger of hemorrhage, or dangerous condition of the patient, this procedure will at times be impossible. Under such circumstances, the edges of the opening in the sac should be sutured to the parietal peritoneum and the sac carefully drained. The placenta in such cases will come away gradually by fragments, and in two or three weeks its exfoliation will have been complete. Surgical intervention should take place as early as possible after the death of the fetus. If the cyst in such a case is in the culdesac, vaginal section is appropriate. After the extraction of fetus and placenta, the cavity should be packed with 5 per cent. iodiform gauze.

2. Calabin: London Obst. Trans., xxxviii, 1896, p. 911.

3. Rein: Centralblatt für Gynäkologie, 1892, p. 969.

4. Morian.

5. Cannaday, J. E.: "Abdominal Pregnancy," Denver Med. Times, and Utah Med. Jour., November, 1908, p. 226.

The author urgently emphasizes the absolute necessity for removal as early as a diagnosis can be made, and the stringent indication for immediate operation when a pregnant woman shows symptoms of intra-abdominal hemorrhage. He reports a case in which the diagnosis was made prior to rupture, but operation was not resorted to until a short time after the rupture had taken place.

In a discussion of pregnancy, Williams⁶ incidentally refers to a case of true ovarian pregnancy, operated upon by him, in which not only the ovaries but also the Fallopian tubes were macroscopically free from any inflammatory reaction. Neither the tube nor the ovary showed any histological evidence of the existence of any inflammatory process. The right ovarian tumor with the Fallopian tube was removed, while the left tube and ovary were sewed. One year and eight months later the patient gave birth to a full-term child, after a normal labor. In this case, the ovarian pregnancy seems to have been due to the non-liberation of the ovum from its Graaffian follicle, the spermatozoon having gained an entrance, and fertilization and development then having ensued, while the ovum remained in situ.

Davis⁷ reported a case of *abdominal pregnancy* in a nullipara, 24 years of age, who was admitted to the hospital with the diagnosis of ectopic pregnancy. The abdomen was flat, except in the right lower quadrant, wholly to the right of the median line, and extending up from the pelvis midway to the umbilicus, where a large tender elastic rounded mass, not freely movable, could be felt. Laparotomy was performed, and a smooth, rounded, blue, ovoid cyst was found, extending up from the pelvis half way to the level of the umbilicus. The cyst was ruptured in the attempt to lift it up through the abdominal opening. About 800 c.c. of amniotic fluid escaped and floated into view a well-formed dead fetus of about four months' growth. There was a well-formed placenta attached to the right broad ligament, the posterior wall of the uterus and the right side of the cul-de-sac. The placenta was readily removed, leaving a dirty yellowish-brown surface with clots, but no fresh bleeding. It was eight centimeters in diameter from the uterine end to the point of dilatation at the outer end, where it enclosed the placenta. Sections through the uterine end of the tube showed a normal structure. The ovary, 4 cm. long, showed peripheral edema, general congestion and slight pigmentation.

Examination of all the records of the Lying-In Hospital of the City of New York, covering a period of twenty years (lacking a few

months), with histories of something over sixty-two thousand cases, resulted in the finding of but one other case of abdominal pregnancy, the history of which is as follows:

Mrs. S. A. (C. N. 722) brought to the hospital in August, 1897, in a septic condition, with history of being one month past term. No sign of fetal life for a month, and a considerable decrease in the size of the abdomen in that time. A macerated fetus and foul-smelling degenerating placenta were removed by laparotomy. The sac, which was adherent to the intestines and abdominal wall, after being sutured to the abdominal wall, was washed out with salt solution and drained through the abdomen and vagina. The patient died from general sepsis five days after admission.

Nicholson,⁸ in reporting a case of *abdominal pregnancy*, admitted that undoubtedly a large percentage of abdominal pregnancies are secondary, that is, follow tubal pregnancy, which terminates either by abortion or by rupture of the tube. According to this author, the termination of extra-uterine pregnancy varies: the fetus may be extracted by operation; it may be delivered alive by abdominal section; it may putrefy and be partially absorbed, ulcerating the confining walls, entering the bladder and bowels, through which the remnants may be discharged; or it may be carried indefinitely in the abdomen in the form of a lithopedion. One that develops to term or near term is a clinical rarity. Werder has collected records of forty cases of ectopic gestation delivered alive. Of these, eighteen died the first week, five the first month; one at 6 months, from bronchopneumonia; one at 7 months, from diarrhea; two at 11 months, from croup; one at 18 months, from cholera infantum, thus leaving fourteen to be accounted for. Of these, five were reported living and well after operation; one after three weeks, one after six months, with no subsequent report. Two were alive and well at 1 year, two at 2 years, and one at 14½ years.

The case reported by Nicholson concerned a woman 42 years of age, whose cervix was found slightly enlarged on vaginal examination, with a soft elastic mass palpable on the right side. An incision was made from the margin of the ribs to Poupart's ligament, and a dead fetus was exposed when the peritoneum was divided, the head being below and the back to the right side. The amniotic fluid was small in amount, and the sac was adherent to the mesentery and omentum. The adhesions were rapidly separated, and the fetus lifted out of the cavity. Up to this time all had progressed without difficulty, but when the placenta, which was attached to the intestinal wall, was removed, the bleeding was furious. The cavity was packed with steri-

6. Williams, C. D.: "Etiology of Ectopic Gestation," *Surg., Gyn. and Obst.*, November, 1908, p. 519.

7. Davis, Asa B.: "A Report of a Case of Abdominal Pregnancy, Operation and Recovery," *Bull. of the Lying-In Hosp. of the City of New York*, v, No. 4, March, 1909, p. 187.

8. Nicholson, C. M.: *Case of Abdominal Pregnancy*. *Interstate Med. Jour.*, St. Louis, October, 1908, p. 795.

lized gauze, and the bleeding controlled, but on removing the gauze the bleeding returned. Five yards of sterile gauze were left in the cavity, and the lower two inches of the incision left open. A part of the packing was removed on the third day, and the remainder on the fifth day. Convalescence was uneventful, and the patient left the hospital well, in four weeks after operation.

The embryo was of female sex, age 125 to 130 days, length 128 mm., weight, after formalin hardening, 174 gm. The length of the umbilical cord was 260 mm., which is somewhat shorter than is usual in this stage of development. The fetal portion of the placenta was smaller than is usually found at that age, and its vascularity was decidedly less than normal.

Doktor⁹ reports a case of *abdominal pregnancy* due to uterine rupture, in the course of gestation. The patient, a woman 28 years of age, fell on the abdomen from a height of several meters, in the sixth month of pregnancy. The accident gave rise to persistent pain and hemorrhage, lasting three weeks. A smooth solid tumor, freely movable, size of a child's head, was felt in the right half of the lower abdomen anteriorly, directly behind the abdominal wall. The uterus could be felt only indistinctly beside the tumor. Laparotomy was performed, and a solid shriveled ovum was found in the anterior peritoneal excavation, adherent to the anterior abdominal wall, the uterus, and the right broad ligament; with the omentum above. The ovum was adherent with one pole, where placental tissue was visible, to the uterus, and a funnel-shaped canal was seen to enter the anterior uterine wall, near the fundus. Total extirpation (abdominal route) was performed, and the patient made a good recovery.

Seeligmann¹⁰ described an unusually interesting case of *abdominal pregnancy at term*, which came to operation, the patient making a good recovery. The placenta was attached for the most part to the lower surface of the liver and gall-bladder of the mother, and for a small part to the parietal peritoneum of the right hypochondrium. The peritoneal lining of the liver, and the parietal peritoneum of the abdominal wall had evidently become sufficiently transformed to represent an appropriate parent soil for the nutrition of the child, up to its complete development.

Expectant treatment was adopted in this instance, and the course of the clinical history suggests this to be the method of election in similar cases, in spite of the extremely difficult situation created by the remarkable insertion of the placenta. Although there was considerable

danger of infection of the abdominal cavity, through the suppuration in the fetal sac, the observation of this case goes to show that the encapsulation by closing off the abdominal cavity supplies a considerable degree of resistance against the infection. The patient left the hospital entirely well, six weeks after the operation. She was a woman 35 years of age, whose illness began suddenly, with the symptoms of ruptured extra-uterine pregnancy. The child was a full-term macerated boy, 56 cm. long, weighing ten pounds. The fetal sac presented at once when the abdomen was opened, and could be palpated above and below, down to the small pelvis. The enlarged uterus (size of about the third month of gestation) and the right and left adnexa were palpable, perfectly intact, and in no way connected with the fetal sac.

The patient's first attack occurred late in December, 1904, when the ovum was about 2 months old, and when it became detached from its probable attachment on the fimbria end of the tube, passing into the free abdominal cavity. Apparently the ovum did not lose its vitality during its migration, but sought a new attachment for itself at the lower surface of the liver, which it must have reached by means of the peristaltic movements of the intestine. At the operation a full-term child was removed. Sept. 11, 1905.

Prawossud¹¹ reports a case of *ectopic pregnancy near term, with a living child*. The mother, a primipara 29 years of age, felt perfectly well during the entire pregnancy, except a mild attack of vertigo in the fourth month. Labor-pains appeared eight months after the last menstruation, and the patient was admitted to the hospital in an attack of eclampsia. The urine contained much albumin. The abdomen, on examination, presented the appearance of normal pregnancy, except that a hard swelling could be felt anteriorly, under the umbilicus. On internal examination there was slight bleeding from the cervix, which admitted the finger; the uterus, on digital examination, was found to be empty, and in front, corresponding to the hard tumor; the head was in the posterior vaginal vault. Celiotomy was performed at once. The amnion was found to be more or less solidly adherent to the anterior abdominal wall, the uterus and the intestine. It was incised, and a living child was extracted.

The placenta was successfully detached, without much hemorrhage. The amnion was also in part detached, and the remainder, which was too firmly adherent, was approached to the abdominal wound and fixed with Mikulicz tampons. From six to eight centimeters of injured and infiltrated small intestine were resected, and

9. Doktor, A.: "Abdominalschwangerschaft in Folge von Uterusruptur in Verlaufe der Gravidität," Centralblatt für Gynaekologie, No. 31, 1902, p. 829.

10. Seeligmann: Ueber einen Fall von ausgetragener Bauchhöhlenschwangerschaft, Deutsche Med. Wochenschrift, No. 22, 1906, p. 879.

11. Prawossud, Th. G.: "Ein Fall von Beinahe augetragener Ektopischer Schwangerschaft mit lebenden Kinde," Jour. für Geburtshilfe und Gynaekologie, 1910 (Russian). Centralblatt für Gynaekologie, No. 34, 1911, p. 1230.

the upper part of the wound was closed. Inspection during the operation showed the left tube to be entirely preserved, with fimbria, in its entire length; the right adnexa were normal; the left ovary was absent, the tube passing to the uterus as in an ordinary ovarian cyst. On the basis of these findings, the author assumes a *pure ovarian gestation*.

The post-operative course was not afebrile, but entirely favorable, the patient leaving the hospital after six weeks. At the end of seven months she returned with a large ventral hernia, but perfectly well otherwise.

The infant presented slight deformities of the extremities, which could be corrected, and some cranial and facial asymmetry. It died at the age of 4 months, from acute gastro-enteritis.

The following case was reported by Filonowitsch:¹² The patient, a nullipara, 29 years of age, was admitted to the hospital on account of delayed delivery and severe abdominal pains. Three weeks later, the diagnosis of extra-uterine pregnancy was made, but the tumor gradually increased in size, without disturbances of any kind, and fetal movements were felt four and a half months later. Normal pregnancy was assumed, and the patient was discharged. She was soon afterwards attacked by severe vomiting and labor pains. On examination the fetal heart sounds were no longer audible; the abdomen was greatly enlarged, the uterus was movable, and corresponded to the third month of gestation. The adnexa were free from infiltrates. Through the posterior vault was felt the lower segment of the fetal sac and the skull of the fetus. The diagnosis of extra-uterine pregnancy, with a dead fetus, was rendered. Some days later, labor pains and hemorrhage occurred, with a discharge of decidua. Laparotomy was performed, and after incision of the fetal sac, a recently dead fetus, of female sex, weighing 3,270 gm., was extracted. Both tubes were normal, free from scar tissue, with distinctly marked fimbria; both ovaries were likewise normal. The patient made a good recovery after *pelvioperitonitis traumatica*.

Vincenzo¹³ described a case of apparently *primary abdominal gestation*, in a patient 32 years of age, with a history of two normal deliveries and one premature labor. The objective examination showed the presence of a movable ovoid tumor, of hard consistency, chiefly in the right iliac fossa. The uterus was apparently of normal size. The diagnosis lay between extra-uterine pregnancy and tumor of the adnexa. Laparotomy was performed, and the existence of a product of conception was demonstrated. There were numerous adhesions with the intes-

tine and omentum, whereas the abdominal cavity was entirely free from adhesions. The uterus was of normal size and in normal position. The tubes and ovaries were likewise in normal position, and on macroscopical inspection presented entirely normal findings in regard to configuration and volume. Careful examination of the extirpated specimen showed it to consist of a tumor, 8½ cm. long and 7 cm. wide, enclosed in a hard, calcified capsule. One pole presented a soft, spongy tissue, which proved to be placental tissue on macroscopical inspection. The interior of the sac contained the remnants of the macerated fetus, plainly recognizable by the bones. There were no fluid contents. The length of the fetal body was estimated as approximately 22 cm. The extra-placental portion of the capsule consisted entirely of connective tissue. The portion resembling placenta showed in the histological picture connective tissue cones which were in part surrounded by blood-containing spaces, and which were interpreted by Vincenzo as the transformed chorionic villi. No epithelium from the amnion or chorion could be demonstrated, and no decidual remnants were found.

In view of the perfectly normal condition of the adnexa on both sides, and of the absence of any communication with the fetal sac, the above-described case may be interpreted as the very rare and interesting demonstration of a primary abdominal pregnancy.

As most recent authors deny the existence of either primary ovarian or abdominal pregnancy, Lewis¹⁴ considers them all as tubal, under the three following varieties: Interstitial or tubo-uterine; isthmic, or tubal; ampullar, or tubo-ovarian. The real cause of ectopic gestation is still a subject of speculation. It occurs most commonly after a long period of sterility, chronic inflammation, torsion, reversal peristalsis, and congenital inflammations. Tumors of the tube, tumors which press on the tube, or bands of adhesions which constrict its caliber, are all contributory factors.

Lewis' patient was a negro woman, 36 years of age, in whose case the diagnosis of ectopic pregnancy past full term was rendered. At the operation, a full-sized male child, apparently dead several weeks, was delivered. The placenta was firmly attached to the base of the sac and could not be removed without great difficulty. As the patient was not in good condition, the sac was packed with sterile gauze and sewed to the abdominal incision with a running catgut suture, and a few silkworm-gut sutures were placed at intervals along the incision, so separating it entirely from the peritoneal cavity. She made a satisfactory recovery, although it

12 Filonowitsch, W. P.: "Zur Kasuistik der ausgetragenen Extrauterinschwangerschaft," *Centralblatt für Gynaekologie*, No. 27, 1907, p. 851.

13. Vincenzo, V.: A Case of Primary Abdominal Pregnancy. *Gynecologia, Fascicolo VI*, 1905.

14. Lewis, H. W.: "Ectopic Gestation with Case that went Beyond Term." *Virginia Med. Semi-Monthly*, Sept. 25, 1908, p. 278.

was several weeks before all the placenta came away.

Center,¹⁵ in reporting a case of *abdominal pregnancy*, called attention to the fact that cases of true abdominal pregnancy are so rare that their existence is disputed by some eminent authors, notably by Lawson Tait, who maintained that all abdominal pregnancies were originally tubal. Tait's dictum was that no tubal pregnancy went longer than fourteen weeks unruptured. If the rupture was directly into the peritoneal cavity, the symptoms were those of shock and hemorrhage, with death of the embryo. If the rupture was between the folds of the broad ligament, he considered it possible for full-term gestation to occur within the broad ligament, or abdominally, if secondary rupture allowed the escape of the embryo into the peritoneal cavity.

Center's patient was a woman 37 years of age, who, in the eleven full months of her pregnancy, had not the slightest personal indication of a ruptured tubal, ovarian, or tubo-ovarian pregnancy. She supposed herself normal until the increasing pain, and the inception of motion, which did not feel like the motion of former pregnancies, called her attention to the abdomen. Fetal motion had ceased about a month before her admission to the hospital. Laparotomy was proposed and accepted. A cyst, covered by skin, fascia and peritoneum, filled with clear serous fluid, was found. The posterior wall of this cyst was the anterior wall of a large tumor within the abdomen. Gauze was packed about the tumor, and an incision was made through the wall. About a pint of greenish fluid escaped, with a decided amniotic odor. Below the incision was the breech of a fetus, which was delivered and found to be a fully developed female, badly macerated. The placenta was at the posterior and inferior parts of the cavity. The sac was then enucleated. It was found adherent to the parietal peritoneum, to loops of the small intestine, to the right broad ligament, to the right ureter, to the fundus of the uterus, to the mesenteric attachments over the aorta, to the extremity of the left Fallopian tube, and to the sigmoid flexure. Anteriorly and superiorly, the fetal sac was so edematous and lifeless that it was very friable. Lower down the adhesions were very firm, especially those to the fundus of the uterus, and to the mesentery. The fundus was considerably torn in freeing the sac, and hemorrhage was quite profuse. There was no opening nor sign of opening, between the sac and the fundus. The right Fallopian tube was free, with no indication of previous rupture. The left Fallopian tube was adherent to the wall of the fetal sac for about one inch at its fimbriated extremity,

but the fimbriae could be distinguished and were not incorporated in the wall of the sac, but were adherent to it externally. *There was no opening between the tube and the sac.* There was no distinguishable mark of rupture along this tube. The mother's recovery was wholly uneventful. The fetus weighed 8½ pounds, the placenta and sac, 1¾ pounds.

Aside from the fact that there positively existed no communication between the tube and the fetal sac, in the above-described case, another point in favor of its being a case of real abdominal pregnancy is the location of the placenta at the lowest part of the Douglas cul-de-sac, the point an ovum would naturally find if free in the abdominal cavity. At no point could be found any indication of a ruptured tubal, ovarian, or tubo-ovarian pregnancy.

On the basis of his findings in the case of a woman 23 years of age, Witthauer¹⁶ was convinced of the occurrence of *primary abdominal pregnancy* upon a flap of the omentum. He believed that such cases might perhaps be found with greater frequency if this possibility were kept in mind in obscure cases of retro-uterine hemorrhages in the abdominal cavity.

The tube in Witthauer's case was perfectly healthy and permeable, more particularly free from any demonstrable evidence of pregnancy. The pregnant omental segment was not adherent to the tube, but had formed adhesions with the pelvis.

The diagnosis in this case had been tubal abortion, and at laparotomy, about one and a half liter of dark fluid and clotted blood was found in the abdominal cavity. An ordinary ovarian cyst was removed, together with the intact and unaltered tube. No cause for the hemorrhage was found in the pelvis and remainder of the abdominal cavity. A piece of omentum presented a hematoma, the size of a finger, which was tied off and removed. Examination resulted in the above described findings of *primary abdominal gestation*.

Campione¹⁷ reported the case of a woman, 39 years of age, who had been confined normally twenty years before, and who had since been well. She was admitted to the clinic on account of severe pains, at the end of the second pregnancy, which had been free from special disturbances. On examination, the abdomen was found to be enlarged as at the end of pregnancy, but tense and painful. The head seemed to be at the pelvic entrance; small parts were palpable high up in the abdomen. Heart sounds were heard in the middle line, below the umbilicus. The vagina was stretched and enlarged, cervix permeable, entire uterine cavity palpable, but empty. Diagnosis of *extra-uterine preg-*

15. Center, C. D.: Report of a Case of Abdominal Pregnancy, Philadelphia Medical Journal, April 14, 1900, p. 871.

16. Witthauer, K.: Primäre Bauchhöhlengravidität auf einem Netzzipfel, Centralblatt für Gynaekologie, No. 5, 1903, p. 136.

17. Campione, F.: "Laparotomy in a Case of Extra-uterine Pregnancy at Term," Archiv. di Ost. e Ginecologie, No. 8, 1908.

nancy at term, with a living child was rendered. Operation was performed in Trendelenburg's position; incision of abdominal cavity in middle line being made. The decidua were adherent with intestine in several places. The placenta was inserted low down on the left side, and was almost spontaneously detached. The site of the insertion of the placenta was abundantly supplied with blood by the left utero-ovarian vessels, which required ligature for hemostasis. The uterus itself, which was enlarged to the size of the third month, did not communicate with the fetal envelopes. The course was afebrile, and the patient was discharged well, after thirty days. She returned a week later with chills and a swelling in the hypogastric region. A collection of purulent fluid had formed, which was removed in a few weeks by means of an incision in the laparotomy wound and counter-orifice in the vagina.

The child weighed 3,470 gm. and continued to thrive.

In a statistical compilation of thirteen cases of laparotomy in extra-uterine pregnancy at term, which were published in the Italian literature, five mothers died after the operation. The mortality of the mothers amounted to 50 per cent. when the placenta was left behind in the abdominal cavity, but only 11 per cent. when the placenta was removed.

In operating for extra-uterine pregnancy at term, the author accords the preference to laparotomy, as compared to the vaginal route.

Maclean¹⁸ reported the following case: The patient was a nullipara, 34 years of age. On the basis of the history and findings on examination, the diagnosis was made of *abdominal pregnancy*, with recent infection of the sac. A median abdominal incision was made between the umbilicus and the pubes, and a sac wall was exposed, densely adherent to the parietes. The sac contained a partially decomposed *full-term* male fetus, in an attitude of flexion, with the head at about the level of the umbilicus and the breech in the left pelvic region. After the extraction of the fetus it was noted that a coil of the cord had become loosely attached to the anterior surface of the lower pole of the sac. This attachment was readily separated, as well as a considerable extent of membrane which was continuous with the placental end of the cord. To this membrane, portions of degenerated placenta were adherent, and some of these were subsequently submitted to microscopical examination. The relations of the cord, the membranes referred to, and the attached portions of placenta, suggested that the placental implantation had been on the inferior and anterior surface of the lower pole of the sac. This impres-

sion was strengthened by the further examination of the sac as a whole after thorough irrigation with iodine lotion and dry swabbing. The uterus, slightly enlarged, was seen to be widely displaced to the right. It was quite impossible, unfortunately, to make out the conditions and relations of the tubes and ovaries; these structures could neither be seen nor felt. No attempt was made to remove the sac. Recovery was uneventful.

Maclean inclines to the belief that the primary implantation of the ovum was in the left tube, it being impossible to state whether the displacement of the pregnancy occurred by way of tubal obstruction or tubo-abdominal rupture. The history and the conditions revealed at the operation did not favor the assumption of an intraligamentous development. Spurious labor occurred at term, and was followed by the death of the fetus and partial absorption of the amniotic fluid. Infection of the sac took place about six months after term, the cause of the infection being probably a minute fistula communicating with the bowel, which was noted at the time of the operation. A large part of the placenta was doubtless absorbed after the death of the fetus, the remainder being represented by the debris and placental portions which were removed from the sac.

Of similar cases, where the extra-uterine gestation has produced a full-time fetus, and where operation had been effected after infection of the sac, eight only are recorded in the *Transactions of the London Obstetrical Society* during the past thirty years.

Toth¹⁹ reported a case of *secondary abdominal gestation*, after rupture of the tube. The patient, who was 44 years of age, had borne nine children. The last menstruation occurred eleven months ago, and no fetal movements had been felt for about five weeks. On the basis of the findings on examination, a full-term extra-uterine pregnancy with a dead fetus was established. The patient's condition required immediate operation, and laparotomy was performed, with removal of a dead child (a boy, 51 cm. long, weighing 2,700 gm.). The placenta was intimately adherent to the tubal angle of the uterus, so that the uterus was torn in the course of the detachment of the placenta, necessitating hysterectomy. The fetal sac was tamponed, according to Mikulicz, and the patient made a good recovery.

Dix²⁰ reported a case of *secondary abdominal gestation*, after tubal rupture, with a mummified fetus, in a woman 28 years of age. On examination, on account of pain and peritonitic symptoms, the uterus was found to be elevated and

18. Maclean, E. J.: "A Case of Abdominal Pregnancy in which the Foetus was removed six Months after Spurious Labor at Term." *The Jour. of Obstet. and Gyn. of the British Empire*, ix, 1906, p. 434.

19. Toth: "Fall von Extrauterin-Schwangerschaft," *Centralblatt für Gynaekologie*, No. 14, 1907, p. 391.

20. Dix, C.: "Ueber sekundäre Bauchhöhlen-schwangerschaft nach Tubenruptur mit Mumifikation der Frucht," *Inaugural Dissertation*, Munich, 1905.

displaced anteriorly. A soft fluctuating tumor was made out in the posterior vaginal vault, and another tumor, the size of a fist, more laterally in the pelvis. The diagnosis was ruptured tubal pregnancy, retro-uterine hematocele, and hematoma of the broad ligament. Three months later, there was a solid tumor in which small parts could be felt, reaching to the umbilicus, with distinct fetal heart sounds. On internal examination, the hematocele was found to have considerably diminished in size, but increased in density. About six months later the tumor reached above the umbilicus. There were no more heart sounds or fetal movements. In the posterior vaginal vault was a solid tumor with an irregular surface, the size of a child's head. At the end of three months the diagnosis of "foetus in abdomine" was rendered, and a compressed fetus 39 cm. long, weighing 1,410 gm. was removed by operation. The adherent placenta was left behind. Recovery.

Fieux²¹ reported the case of a woman, 32 years of age, in the fourth month of her second pregnancy, the anamnesis as well as the examination being typically suggestive of extra-uterine gestation. Laparotomy was performed, on account of evidence of acute anemia, and a fetus 12 cm. in length was discovered in the abdominal cavity. The placenta was attached at the posterior side of the uterus, the terminal segment of the colon, and coils of intestine. Complete removal of the placenta did not appear to be possible, and two large tampons were applied to the bleeding points and left in position. The patient died a few days later, under symptoms of acute gastric paralysis. No autopsy.

No detailed statements concerning the findings in the adnexa were made, but Fieux assumed that it was a case of *secondary abdominal pregnancy*, which was preceded, according to the anamnesis, by the rupture of a tubal pregnancy, five to six weeks prior to the operation.

Linck's case²² of *primary abdominal pregnancy* concerned a woman 39 years of age, who suddenly fell ill with symptoms of grave internal hemorrhage. The diagnosis was extra-uterine pregnancy, with a recent retro-uterine hematocele, and laparotomy was performed. Besides large amounts of fluid blood, a round cavity the size of an apple was found, the cavity walls being formed throughout by smooth peritoneum, which had become agglutinated above, all but a very small entrance orifice, and was filled with blood clot. After this had been evacuated, a fairly solid, rounded, whitish-yellow, soft tumor was found in Douglas' space, firmly attached to the posterior peritoneal fold.

The tumor was about the size of a hazel nut, and was of distinctly papillary-villous structure, projecting into the cavity after the fashion of a polyp. The small tumor was detached with its base, a thin layer of peritoneum. Not the slightest trace of fetal remnants was found anywhere. Uterus, tubes and ovaries were in the proper relative position, and were absolutely unchanged externally. The microscopical examination of the tumor showed it to be a chorial placenta the epithelium of which had proliferated as a trophoblast, with or without a villous stroma, into the peritoneum of the posterior Douglas fold, thus providing for an intimate organic connection with the same. The microscopical examination also failed to show any fetal parts.

Linck emphasized that this case cannot be interpreted otherwise than as a primary abdominal pregnancy, in which the aberrated ovum became primarily attached at the posterior peritoneal fold, low down in Douglas' space. After the product of conception had died and had become absorbed, the chorion led to profuse intra-abdominal hemorrhage, either through its partial detachment of through the rapid opening of large blood-tracts. He maintains that the assumption of a primary abdominal gestation rests upon the demonstration of an organic trophoblastic connection between the ovum and the matrix in the abdominal cavity, as well as upon the exclusion of a primary pregnancy in the genital apparatus.

This case of *primary abdominal gestation at term* was reported²³ at the Genecologic Section of the Budapest Medical Society, in November of 1906. The patient was a nullipara, 21 years of age. The abdominal swelling was recognized as a full-term extra-uterine pregnancy, with a dead fetus, and it was removed by laparotomy. The adnexa on both sides were found to be intact. The fetal sac was lying at a distance, and contained a mummified, fetus 37 cm. in length. In the microscopic examination, no parts of the tube or the ovary could be discovered in the walls of the sac, so that the case must apparently be interpreted as one of the rare instances of primary abdominal pregnancy.

In the discussion one of the speakers pointed out that pregnancy in an accessory tube can be excluded only through examination of serial sections. Another speaker emphasized that the placenta had been attached to the posterior layer of the broad ligament. On the basis of the histologic examination of the specimen, Lovrich later on admitted that this pregnancy was of the *secondary abdominal type*, being derived from an accessory tube with enormously hypertrophied muscular walls.

21. Fieux: "Extrauterine Abdominal Pregnancy," *Revue Pratique d'Obstétr. et de Pédiat.*, April, 1908.

22. Linck, A.: "Ein Fall von primärer Bauchhöhlen-Schwangerschaft," *Monatsschrift für Geburtshilfe und Gynaekologie*, xx, 1904, p. 1257.

23. Lovrich: "Ein Fall von ausgetragener primärer Abdominalschwangerschaft," *Centralblatt für Gynaekologie*, No. 45, 1907, p. 1416.

Sittner's²⁴ case of *secondary abdominal pregnancy*, with a *full-term living child*, concerned a woman 34 years of age, who had borne one child, fourteen years previously. The abdominal gestation was the result of rupture of a sac which had primarily developed in the left tube. After the rupture, the placenta became lodged in the free abdominal cavity, and was detached with difficulty from the intestine, the omentum, etc. The child, a boy, weighed 3,250 gm., had a length of 48 cm., and was free from deformities. Both mother and child survived. The placenta was not left behind at the operation, but total extirpation of the entire new formation was successfully accomplished, in spite of considerable difficulties.

Advanced extra-uterine pregnancies, in which a living child is obtained through laparotomy, are not an every day occurrence, and it is especially rare for two such cases to occur in the experience of the same author. The author was enabled, in 1900, to observe and report a case of extra-uterine pregnancy which had progressed to the eight lunar month, while the above described case went to term.

Jarzeff²⁵ points out that several forms of ectopic pregnancy may simulate a genuine abdominal pregnancy; so that this diagnosis should be rendered with great caution even on the anatomical specimen. Only those cases should pass as certain, in which neither the tubes nor the ovaries are involved in the formation of the fetal sac. In the author's opinion true abdominal pregnancy actually occurs in women, although very rarely. At the present state of our knowledge, it cannot be positively ascertained if the ovum is primarily implanted on the peritoneum, or if it passes through the first developmental stages in the tube or in the ovary.

The author's personal observation concerned a childless woman, with a moderately distended very painful abdomen, and a painful resistance in the posterior vaginal vault. The diagnosis was bilateral tumor of the adnexa. The swellings did not subside under conservative treatment, and an operation by the vaginal vault showed Douglas' space to be filled with blood-clot, between which lay a fetus of five weeks. Furthermore, two dermoid cysts were found and removed. Both tubes were normal. The patient made an uninterrupted recovery. The microscopic examination of the dermoid cysts showed total absence of elements belonging to the ovum; the walls of both cysts contained corpora lutea. The tubes were found to be normal also on histologic examination. On the

basis of these findings, the author assumes a *true primary abdominal gestation*.

According to Gröné²⁶ the anatomy and treatment of extra-uterine pregnancy was the first subject discussed at the Tenth German Gynecological Congress, held in Würzburg, in 1903. Concerning *abdominal pregnancy*, the first speaker, J. Veit, stated that *primary abdominal pregnancy* does not occur in human beings, or at least has never been unobjectionably demonstrated. Although it may be theoretically maintained that the ovum may become imbedded also upon the peritoneum, this has never been proved. Only such ova as are found living in the abdominal cavity, and whose placenta is in vital communication with the peritoneum, without any participation of the tubes or ovaries, can be regarded as conclusive evidence, in Veit's opinion, so that all cases reported up to that date did not pass muster. This view of Veit was not refuted at the Congress, nor has it been shaken since by any publication in the literature, as far as Gröné was aware at the time he published his case. Veit's views, therefore, presumably still represented the general opinion of the profession.

A case which came under Gröné's observation in June, 1907, lends itself well to an investigation of the occurrence of *primary peritoneal pregnancy*. Although this case does not entirely meet the conditions, formulated by Veit at the Würzburg Congress, for a primary abdominal gestation, the existing proofs nevertheless seem to suffice for the assumption of the peritoneum as the site of implantation of the ovum, so that the case must be interpreted as a primary peritoneal pregnancy.

The patient was a woman, 23 years of age, who had twice given birth normally, and was still nursing the last child. She was admitted to the hospital, on account of severe colicky pains, about six weeks after the last menstruation. The diagnosis of right-sided tubal pregnancy was rendered on the basis of the findings on examination. At the operation the right adnexa showed no source of hemorrhage to account for the rather considerable amount of mostly fluid blood in the peritoneal cavity. The left adnexa were likewise entirely free from macroscopical changes. A bleeding surface, the size of a silver quarter, was discovered at the right side of the pelvic peritoneum, where the peritoneum turns from the pelvic wall to form the broad ligament. This area was bounded in a mesial and anterior direction, by the round ligament, laterally and behind by the cecum. This sharply outlined spot presented an irregularly roughened surface, and could be easily detached from the base. It was extirpated to-

24. Sittner, A.: "Ein Fall von sekundärer Abdominalgravidität mit ausgetragenem lebendem Kinde," Deutsche Med. Wochenschrift, No. 30, 1906, p. 1200.

25. Jarzeff, A.: "Zur Frage über die Bauchhöhlen schwangerschaft," Monatsschrift für Geburtshilfe und Gynaekol., xxviii, 1908, p. 144.

26. Gröné: Ein Fall von primäre Peritoneal Schwangerschaft, Centralblatt für Gynaekologie, xxxiii, 1909, p. 45.

gether with a narrow strip of the surrounding normal peritoneum.

Microscopical examination of the specimen established the existence of extra-uterine pregnancy. Although no fetal remnants were found in any of the sections, a fetus had evidently been present, and had probably perished in consequence of hemorrhage in the ovum, undergoing subsequent absorption, or escaping attention at the operation. However, some remnants of placenta, which positively confirm the diagnosis of pregnancy, were found in several places of the specimens. Presumably, the ovum had lodged free, that is, without adhesions, on the peritoneal surface, surrounded by a connective tissue capsule, leaving fetal elements behind after it had become detached. Several sections of the right tube presented a perfectly normal appearance under the microscope; the tubal mucosa was arranged in folds of normal size and number; the epithelium was normal throughout, as far as the outermost parts of the fimbria. No other implantation for this pregnancy, besides the above noted circumscribed surface of the pelvic peritoneum, could be demonstrated, either in the macroscopical examination of the tubes and ovaries during the operation, or in the microscopical examination of the right tube, in serial sections.

The following positive arguments may be quoted in proof of the peritoneal surface being the actual site of implantation of the ovum: (1) A distinctly necrotic layer was found, especially well marked in certain places, and very closely connected with the subjacent tissue. This necrotic layer evidently corresponds to the fibrine-membrane of Nitabuch in intra-uterine pregnancy. (2) Outside of this layer, but in close connection with it, undoubted chorionic villi were found. (3) In immediate contact with these villi there were cells of epithelial character, distinctly different from the swollen peritoneal endothelia and other cell-elements, but greatly resembling in part trophoblastic cells, and in part syncytial cells.

Underneath the necrotic layer, no other changes were found besides the signs of a mild chronic inflammation, expressed partly by rather scanty round-celled infiltrations, especially locally around the veins; and in part by particularly constantly swollen peritoneal endothelia. The tissue was highly edematous. No cells resembling decidua were found.

An important factor in the *etiology* of extra-uterine pregnancy, according to Freund,²⁷ is represented by the behavior of the cilia of the tube, which favor the propulsion of the ovum in the tube. Diseases associated with atrophy of the cilia, such as inflammations, favor the occurrence of tubal implantation of the ovum.

This includes imperfect development of the cilia, in infantilism, in which condition extra-uterine pregnancy is not uncommon. Furthermore, the normal propulsion of the ovum is hindered by perisalpingitic adhesions, through constriction or obstruction of the tubal lumen. Inflammation of the tubes is apt to follow even upon minor uterine operations. The outcome of tubal extra-uterine pregnancy is tubal abortion, or rupture, sometimes combined.

The *diagnosis* may prove difficult before the onset of internal hemorrhage, especially in regard to the differential diagnosis from uterine pregnancy, with tumor of the adnexa. Although bilateral occurrence is suggestive of inflammatory tumor of the adnexa, there may be extra-uterine pregnancy together with a simultaneous affection of the adnexa on the other side. In the stage of rupture, or abortion, the diagnosis is usually easy, based on the signs of internal hemorrhage, collapse, behavior of the pulse, peritonitic symptoms, demonstration of hematocoele, and the history given by the patient.

In the opinion of Freund, all cases of extra-uterine gestation should be *operated upon*. Among 112 patients, he had no death in consequence of the operation. The most suitable operative method consists in operation per laparotomy.

CONCLUSION

First: I believe that it is proven beyond doubt that true abdominal pregnancy may occur.

Second: That the great majority of ectopic pregnancies, coming to term or near term, are tubal pregnancies originally.

Third: That in many cases of ectopic pregnancies near term the child may be saved if a correct diagnosis is made and prompt surgical attention given.

Hume-Mansur Building.

DISCUSSION ON THE PAPER OF DR. CLARK

DR. CHARLES M. MIX, Muncie: Perhaps, I cannot do better than to add that in our community we have had a case of extra-uterine pregnancy which was operated upon successfully, and with a dead fetus. I saw the case first when the woman had her first rupture. I thought it was a primary tubal condition. The patient gave a typical history of missed menstruation, followed by irregular bleeding, by sudden acute abdominal pain, fainting and collapse. She was in the country at the time, was brought to Muncie, and I saw her with the family physician. She did not like my diagnosis, and therefore called in a chiropractor who tried to rub it out, and did not succeed. After three months Dr. Andrews was called to see the case, kept her under observation, and at the end of three weeks operated on her successfully. He made a Roentgen-ray picture, which he may have brought to this meeting.

27. Freund, H.: "Ueber Aetiologie, Diagnose und Therapie der Extra-Uterin-Schwangerschaft," Strassburger Medizin. Zeitung, xii, 1910.

There are one or two points in connection with ectopic gestation or ectopic pregnancy in general that interest me. One is the question of the primary pain. It is generally conceded, I think, that the primary pain of ectopic rupture is in the lower abdomen. That has not been my experience at all. The primary pain has been in the majority of cases epigastric or umbilical, and it settles down into the lower abdomen exactly as the primary pain of appendicitis is first epigastric or umbilical and settles down in the right iliac fossa. I have seen that happen, and I have thought of it and watched it, so that I feel as if that observation will prove correct.

The question of when to operate for ectopic pregnancy seems to be one that has not yet been fully settled, and probably has to be settled in accordance with the exigencies of the occasion. I think sometimes it is really better to wait until the patient gets over the shock of the primary rupture, until the pulse settles down and the hemorrhage stops. In my opinion, the majority of ruptured ectopics will cease bleeding of their own accord if kept perfectly quiet. On the other hand, we run into cases where such a procedure would prove disastrous. Such an instance occurred in my practice about a year ago. The patient was well known to me; I learned from the family physician she had been walking on the street, and I was called to see her immediately. She had a sudden pain in the pit of the stomach; she had to lie down for a while. She was brought to the hospital, so that I had her under observation from the beginning. She was in extreme collapse, showing marked signs of internal hemorrhage. I tried to keep her until hemorrhage stopped, and it did stop apparently, and then it began again. After waiting three days and the patient was getting in a worse condition—and was then suffering from an acute hemorrhage, was cyanotic, with a pulse of 160—it seemed to me best to make an attempt to save her life. We operated and found a rather unusual pathology. The pregnancy had occurred as an interstitial pregnancy just at the cornu of the uterus, but had not ruptured internally, but externally. The thick tissue of the uterus did not contract and the hemorrhage did not stop spontaneously. There was a large opening and the fetus there was discharged into the abdominal cavity; the placenta was partly discharged, and bled profusely. The patient was operated on under nitrous oxid gas and novocain rather quickly, she suffered no shock, and was in a better condition really in fifteen minutes after operation than she was before. She continued to improve and left the hospital in the usual time.

DR. THOMAS B. EASTMAN, Indianapolis: In all the realm of surgery it seems that we have to think of two special dispensations, one for fibroid tumors, of which we are told that we

ought to let an innocent fibroid tumor alone. As for myself, I never saw an innocent fibroid tumor of the uterus. The other special dispensation is in a case of ruptured tubal pregnancy. We are told, as we have been told by Dr. Mix, that in a certain percentage of cases, if these cases are let alone, the hemorrhage will cease. In the case of an innocent fibroid tumor, I never have seen one stop bleeding of its own accord except by one method, and that is a method that we always use in any other case of a bleeding vessel. Whenever we find a bleeding artery in any place else we tie it off; but as I have said, we are told to let some of these cases go on without interference. It is much safer to get in there and tie the artery off, and then we know the patient will not bleed to death, but otherwise we do not know and we have to trust to the grace of God.

DR. CHARLES STOLTZ, South Bend: It is very important to recognize cases of tubal or extra-uterine pregnancy early, and then operate in order to guard against imminent danger which may follow in the future. I do not suppose any member here would recommend waiting if he knew he had a tubal pregnancy to deal with.

I want to emphasize what Dr. Eastman has said, namely, we would never think of letting a bleeding vessel or a plexus of bleeding vessels go and do their fatal work without resorting to ligation, if we are allowed to operate.

There is another considerable danger in connection with some of these extra-uterine pregnancies, and that is the damage done by adhesions that are formed. The placental tissue has a tendency to spread out and grow and proliferate like moss, and a number of organs may become involved. If any of this should get free in the abdominal cavity it will cause trouble. Where there is a disturbance to the tissues of an inflammatory nature there is the development of hyperemia, and there is a tendency for other structures to become involved, particularly adhesions to the tubes and uterus. We have seen this occur, and the longer it goes on the greater the damage done.

I operated on a woman two months ago. It was a case of missed labor. A diagnosis of extra-uterine pregnancy was made and placenta praevia. The child died at 8 months, the fluid became absorbed, and the uterus shrank just as a fibroid would. Various waiting propaganda were advised in this case. I made a diagnosis of missed labor at fourteen months; I went in and got a five-pound fetus, which was beginning to mummify, and there was a placenta praevia centralis which had simply bled right along until the child died, but above all, around the uterus it was reduced to the thinness of paper; there was atrophy of the muscular tissues; there was a fragile sac, which I removed entirely. But the intestines, the pelvic colon and every

structure were attached to it. I had to shell out the ovaries and everything. So when these inflammatory processes go on in the pelvis we had better go in and work quickly. We should not wait for Nature to take care of the patient.

DR. E. J. McOSCAR, Fort Wayne: I wish Dr. Clark in closing the discussion would give expression to the importance in these cases of recognizing them and relieving them without the hope that they will get well of themselves.

It has been my fortune in the last five months to have seen eight cases of advanced ectopic pregnancy with rupture which came in for treatment, seven of which have gone out recovered, and the other is but 24 hours old.

The most important thing to consider in connection with these cases is the diagnosis. The surgery is easy. When we have an obscure case and are not so sure of our diagnosis, it seems to me it is folly to think for a moment that Nature is going to take care of the case when you have alarming symptoms which are not quite clear, and when a patient gets the kind of pain which goes with ectopic rupture, you had better interfere as soon as possible.

Dr. Mix spoke of epigastric pain. I remember one case in which the pain was confined to the epigastrium. It was very severe before rupture took place and the patient went into collapse.

As to when to operate on these cases, we should do so as soon as we find a patient in this condition. A primipara very frequently is the one who has this amount of trouble associated with the condition of either a pregnancy within the uterus or with a fibroid. In one case I recall physicians had made a diagnosis of ruptured ectopic pregnancy, and the patient was brought to the hospital with that end in view. The one case that was not so diagnosed was a woman who had fibroids. She was supposed to have tumors in the abdomen which involved the uterus. She was seized with a sudden active pain, was taken to the hospital, and at operation the abdomen was found filled with blood, but she was operated on because of extreme abdominal pain which was present and which could not be accounted for unless there was a twisted pedicle. The next day she was found to have ectopic pregnancy. Contrary to the advice of some of our good friends, I think it is dangerous to take out too much when you have got a condition of that sort. Her abdomen was opened for the purpose of removing the fibroid, but she was found to have a pregnant uterus.

As has been said in the paper and by the discussors, there is only one thing to do, and that is to make the diagnosis, don't wait for anybody. If you do not know, operate.

DR. H. A. DUEMLING, Fort Wayne: In the pathologic exhibit on the third floor of the

Commercial Club you will find a specimen of full term pregnancy which occurred totally within the tube. It was from the case of a young woman, about 21 years of age, in whom a diagnosis of ectopic pregnancy was made in the early months by Dr. Morgan of our city. Unfortunately, this case got away from the doctor, and from under his observation, and was not seen again until I saw the patient about two months after missed labor. At this time the abdomen was filled with a large tumor that fluctuated. She had considerable elevation of temperature, a rapid pulse, and she had some cysts. A diagnosis was made at this time of a suppurating ovarian cyst. On opening the abdomen we found a full term child, with a large placenta. There was considerable inflammatory reaction, and the pregnancy was absolutely within the tube. If you will take the trouble to examine that specimen you will find the gestation sac is the tube and nothing more. In this case the adhesions around the tumor mass were not so constituted that we could overcome them and remove it all.

In that pathologic exhibit you also will find a case of multiple fibroids of the uterus, some of the fibroids being of large size, others smaller, and accompanying them a pregnancy. This patient was operated on, a correct diagnosis having been made from the beginning, and the tumors with the pregnancy were removed.

I would like to say a few words about the proper time to operate on ruptured ectopics. I feel very much like Dr. Eastman does. I wish to add to what he has said, this, that rarely do these patients bleed to death. In my experience I know of but one case where this has occurred and that case was seen some twenty years ago. The patient actually bled to death. A postmortem was made. We find in these cases that these patients are pulseless, pale, in deep shock, and cold, but when we put them on the operating table, with proper precautions, and fill up the depleted circulation, we will find, nearly always, that they will get well when we open the abdomen, ligate the vessel, and remove the tube. That seems to stop the hemorrhage.

I think the infection in the case reported by Dr. Clark came more through the handling that was done under circumstances which perhaps he could not control before the patient came into his hands.

DR. H. H. MARTIN, Laporte: I think the tendency to spontaneous hemorrhage in these cases of ectopic pregnancy is governed a great deal by the site of the rupture. About a year ago I had an experience with two cases that illustrated that point very nicely. The first patient was quite a large, full-blooded woman in whom rupture occurred at about 8 o'clock in the evening, and she was on the operating table

at 11 o'clock. In probably fifteen minutes after the onset of pain she was helpless. At the time she went on the operating table it was impossible to count her pulse, and it looked as though she was dying. She was about six or seven weeks along in the development, and the rupture occurred at a certain place in the tube. The rupture was right through the placenta. There was an enormous amount of blood in the abdomen, and it looked as though it was quite evident that the patient would bleed to death in a short time. On going through the peritoneum blood spurted up like a fountain.

About six weeks after that I had another case in which the woman was seized with a sudden pain, and was operated on in four hours after the onset of the pain. The amount of handling of the abdomen was comparatively small. The hemorrhage had been entirely from the fimbriated end of the tube, and of course was not large in amount. The pain was as severe as in the other case.

There is one thing in the diagnosis that I believe is of importance, and that is the similarity between pelvic pregnancy and the normal contractions of the uterus in labor. These patients will notice that themselves if they have ever been pregnant. It usually occurs in primipara. That is usually the observation of the physician and there is a marked similarity to normal labor pain.

One reason why I think these patients recover so rapidly after these extreme hemorrhages is on account of the provision that has been made for bloodmaking for women during pregnancy, and I believe they do recover from the effects of hemorrhage much more rapidly than patients would at any other time.

DR. A. M. HAYDEN, Evansville: The mere fact that a patient bleeds to death warrants us in operating on all of these cases of ectopic pregnancy as soon as the diagnosis is made. It is better, if possible, to operate before rupture has taken place. The ideal time for operation is before rupture has occurred. The important thing is to make the diagnosis, and if you can do this before rupture has occurred and operate, you are much more likely to save the life of the patient. All of these cases of tubal pregnancy must be operated eventually anyway in order to make complete recoveries. I have seen cases all the way from three weeks up to nine months; I have had one or two cases of full term tubal or abdominal pregnancy and I have seen during my period of practice two patients who died from hemorrhage. I never have had a patient die that was operated on at any period, although I have had some patients who were ready to die from the loss of blood. When they came off the operating table they were almost completely exsanguinated. In these cases the circulatory system should be filled with nor-

mal saline to restore the circulation as fast as possible; but I certainly would advocate immediate operation in every case of tubal pregnancy as soon as the diagnosis is made, whether it is made previous to or following rupture.

DR. A. S. JAEGER, Indianapolis: I would like to ask Dr. Clark whether either one of these patients gave a history of interruption of pregnancy?

DR. CLARK: The first case did, the second case did not.

DR. JAEGER: I was fortunate to see a case two months ago in an unmarried woman who absolutely denied pregnancy and claimed that the reason a vaginal examination was made was due to the fact that she had had some menstrual disturbance which necessitated this examination. She gave a history of never having stopped normal menstruation, but the last menstruation was followed by shock. Accepting her word, my diagnosis after examination was that of hemorrhage into the broad ligament. Operation disclosed a three months' pregnancy with the placenta attached to the posterior aspect of the broad ligament. The placenta had become partially detached and the hemorrhage caused the symptoms.

Now, regarding Dr. Mix's statement about the site of pain, that same factor has been impressed upon me very frequently. It is only by bimanual examination, where we suspect the possibility of an ectopic pregnancy, that a patient claims the primary site of pain is in the epigastrium, and it is the experience of some of us that some of these patients usually do not have much pain at any time.

As far as the time of operation goes, I personally cannot see why we should not operate on every case as soon as the diagnosis is made. No matter how bad the condition of the patient may be, with a blood transfusion, operation can be done as well in the country as elsewhere. I have read of patients being transfused in France in the trenches in which the operators never attempted to make tests of hemolysis. They report no bad effects from the use of citrate of soda, and that is so simple that anyone can do it. It is surprising to see the remarkable effects from blood transfusion, not in hours, but minutes. If we wait for the patient to become a better surgical risk we cannot improve upon blood transfusion.

Dr. Hayden stated that the time to operate is before rupture has taken place, but we know that very frequently neither the physician nor the surgeon sees the patient until the rupture has occurred. Frequently the patient herself is surprised, when told to have an operation, that her condition was due to pregnancy.

DR. ALFRED F. SCHMAUSS, Alexandria: I would like to emphasize the point made that

these cases of extra-uterine pregnancy should be operated before rupture takes place, provided a diagnosis is made, and further provided the symptoms are serious enough to justify going ahead. I think valuable time is sometimes lost in trying to make a positive diagnosis in these cases.

The diagnosis of extra-uterine pregnancy is similar to that of appendicitis. We know that in cases of appendicitis we should urge operation as soon as the diagnosis is made. The same is true in cases of extrauterine pregnancy. If these patients come under our observation before rupture takes place, if proper attention is given to them and a careful examination made, I believe the diagnosis can be made before rupture occurs. If a patient should come under observation after rupture has taken place, she should be operated on just like we would operate upon an acute case of appendicitis, at once. Some of these patients get well after rupture which is accompanied by peritonitis, but I do not think anyone would wait until Nature has established a walling off of the hemorrhage, but we should go in at once, provided the condition of the patient justifies it.

DR. J. W. SHAFER, Lafayette: Dr. Schmauss has called our attention to the fact that by means of a careful examination and close observation of these patients the diagnosis can be made before rupture occurs. In two or three instances by careful observation and examination I have operated before rupture has occurred.

As to the frequency of extra-uterine pregnancy, it must be quite common, judging from the number of men who have taken part in the discussion and have reported cases. The discussion shows that there are more cases of extra-uterine pregnancy than we have been led to believe was possible.

As to the time of operation, I am sure the time to operate is before rupture has taken place, but how many cases come to use commonly as the result of hemorrhage and the patients themselves not having consulted a physician until hemorrhage has taken place, and that of itself has brought them to the physician.

I believe I have made more mistakes in the diagnosis of extra-uterine pregnancy than any other class of cases. The coincidence of fibroid tumors and extra-uterine pregnancy has been remarkable in my experience. I am called upon to examine cases in which from the history one is led to make a diagnosis of fibroid tumor of the uterus and to advise operation, but extra-uterine pregnancy was generally the thing that stirred the tumor up and brought the patient to the operator.

I have had a rather peculiar experience with extra-uterine pregnancy in that a number of cases have been seen in the wives of doctors on whom I have operated. Whether the observa-

tion of so many cases of extra-uterine pregnancy in the wives of physicians is due to the fact that they were seen and diagnosed early, or whether physicians' wives happen to have extra-uterine pregnancy more commonly than other classes of women—a thing which I do not believe—I do not know. However, in almost all the cases rupture had taken place, the rupture being the thing that enabled us to make a diagnosis.

DR. D. S. WIGGINS, Newcastle: In the last two years I have had occasion to see ten cases of tubal pregnancy, six of which were ruptured, four unruptured and operated for cystic pedicle or appendicitis, or some other pathologic condition. That, of course, exposes my own ignorance when it comes to the consideration of the diagnosis. However, I find consolation in the fact that other physicians fail to make a diagnosis in some of these cases.

I agree with those who have spoken that the ideal time to operate is before rupture has occurred, but we do not find them. In the first place, we are not the ones who see these cases first, but it is the ordinary practitioner who sees them and it is up to him to make the diagnosis. However, whether the man who opens the abdomen would do any better than the general practitioner is a question.

I have had occasion in the last seven months to spend five weeks in some of the large clinics, and I must say that the men connected with these clinics are no more expert in making diagnoses in these cases, as well as in other pathologic conditions, than we practitioners who live in the smaller cities. The average Hoosier practitioner, educated under the old plan of trusting in himself, being thorough in his diagnosis by the sense of touch, sight and hearing, has been raised considerably in my estimation after seeing these other men, and the men in our large clinics who trust to a blood count, to the use of the Roentgen ray, and to laboratory findings, have been lowered in my estimation. Having been an intern in Bellevue Hospital, where we have some of the best men in New York City, I can say that the average practitioner in our Hoosier cities can simply beat them hollow on diagnosis, particularly those who simply depend upon a blood count and the use of the Roentgen ray to the exclusion of everything else. I have more and more respect, after visiting these clinics, for the gentlemen who are doing their work in the country and small towns. But we do not need the laboratory; we must have it, but it will not help in the diagnosis of tubal pregnancy. In five months I have seen but one diagnosis of extra-uterine pregnancy made correctly before operation.

DR. GEORGE R. ANDREWS, Muncie: This discussion is of the greatest importance and significance to the general practitioner. Cases of

extra-uterine pregnancy are not unlike those of carcinoma of the cervix. If we see the case early, we feel we have more chance of handling it surgically. But the great trouble is that we do not see these cases of extra-uterine pregnancy very early. In about forty cases of extra-uterine pregnancy that I have come across during my professional career, I have seen but two before rupture had occurred. One case was advanced two months beyond term. But in only two cases out of forty-one or forty-two has anybody ever seen them before the symptoms of hemorrhage and shock.

It seems to me, we should educate the laity along the line of consulting physicians in time when these women have symptoms that would lead them to suspect that something is wrong in the abdomen, rather than accept the diagnosis of the physician himself.

I recall having had two interesting cases, one of which Dr. Mix saw early during the period of rupture, and which fell into my hands later, I think at about the seventh month. It was an abdominal pregnancy. The placenta was attached to the posterior aspect of the broad ligament. In the other case the woman manifested nothing unusual in the course of her gestation except that she did not come to labor at what was supposed to be her term. She went two months beyond term. The case was referred to me and I made a diagnosis of abdominal pregnancy, and operated with a dead child. This woman had a fibroid uterus; but the point that appeals to me is the joke about this talk on diagnosis when nobody sees these patients until rupture has taken place.

DR. CHARLES C. TERRY, South Bend: A good deal has been said this morning about the diagnosis of tubal pregnancy, but one of the most important things of all in reference to it has been overlooked, and that is the history of the case. I do not believe there is any man who can make a diagnosis of tubal pregnancy by a vaginal examination, bimanual or otherwise, and feel certain as to the diagnosis if he ignores the history of the case. All of these cases of tubal pregnancy give a distinct and positive history as regards menstruation. There are very few conditions where the woman has given a history of normal menstruation, and in each case during the menstrual period there is irregularity as to the time or in amount and character of the discharge. Practically all of these cases of tubal pregnancy have a characteristic feature about the discharge, it being of a mucous or slimy character. If we do not get the history of the case with our examination, and collect all the evidence we possibly can, in a good many cases we are not going to make a diagnosis of the condition.

One of the important things in the diagnosis of tubal pregnancy, and I think it is present in-

variably, is the pain the patient suffers with manipulation of the cervix. It is not necessary to be able to palpate a tumor, but the history of the case will give us a clue as to the rupture. In all these cases, where there is manipulation of the cervix accompanied by pain, you are reasonably sure in making the diagnosis, as they all give this one sign. One of the most important things is not to make a diagnosis of the exact condition present, but whether the condition is surgical or not. With a sudden severe pain in the abdomen, and with the clinical symptoms that occur in the abdominal lesion, I believe we are justified in opening the abdomen. Many times we delay too long to make an accurate diagnosis of the condition to the detriment of the patient. It is true, a good many errors in diagnosis are made in cases of tubal pregnancy, but that is true in all abdominal conditions. We are depending too much upon the blood count, the Roentgen ray, and fooling away time when we should get busy. The man who use his fingers, his eyes and his ears, with other instruments of precision is really a diagnostician, and no one can make a diagnosis of an abdominal condition and ignore the history of the case absolutely.

DR. JOHN SLUSS, Indianapolis: I have listened to the discussion with a great deal of interest. There is not a very wide variance of opinion on this subject. I think we are nearly all agreed that immediate operation, where rupture has taken place or even before rupture, is indicated. But I do not regard the condition of ruptured tubal pregnancy as so grave an emergency as I formerly did. I have been impressed with the idea that a patient was likely to bleed to death in a few minutes or a few hours, and I think we should carry in our minds a picture of what a real rupture means. As a matter of fact, it is only exceptionally that an artery of any size is torn. The symptoms of gravity in the early stages of ruptured ectopic pregnancy are very frequently those of shock. It is impossible in such cases to differentiate between shock and hemorrhage, but the point is this: If we do not get scared to death and perhaps rush the patient immediately to the hospital, we will find the symptoms will subside, because the tendency of the symptoms of shock is rapidly to subside, likewise the symptoms of severe hemorrhage, so that in the majority of cases I think we will find the very grave symptoms of rupture arise from shock, and if we treat the shock properly we will find these graver symptoms will subside in a short time, and in the meantime we can go ahead and prepare the patient for an operation which should be done. But I do not think we ought to lose sight of the symptoms of shock.

DR. CLARK (closing): I have not very much to say in closing the discussion on my paper. I

think the teaching of Hunter Robb, who has advocated waiting in these cases of ruptured ectopic pregnancy, has done a great deal of harm.

I agree with those who have spoken that the time to operate is as soon as you make the diagnosis, and I do not believe any of us are to blame for not making a diagnosis after rupture has occurred. Dr. Andrews has mentioned the reason for that. We rarely see these women before rupture has taken place; they are not conscious of the fact that they are pregnant themselves. That, however, has nothing to do with the paper I have read on ruptured ectopic pregnancy.

The one point I want to bring out is the importance of operating upon these cases as soon as the diagnosis is made, but what is more important is to make the diagnosis before you operate so that you may have time to prepare for the difficulty before you. If you happen to come across implantation of the placenta, as I did in my last case, and get into the placenta, you will have a frightful hemorrhage as the result of that, and it means rapid work to deliver the placenta. It means you must control the hemorrhage at once or you will lose the patient on the table from hemorrhage. That was the main thing I had in mind.

Another thing of importance is the necessity of removing the uterus to be able to extract the placenta. I would rather do this than deal with the placenta and depend upon its coming away piecemeal. I believe it is a safer procedure. I thank you very much for your liberal discussion.

RADIUM THERAPY*

T. C. KENNEDY, M.D.
INDIANAPOLIS

All new things in medicine are greeted with scepticism by the profession, and to this rule radium has been no exception.

Radium has been claimed by some enthusiasts as a sure cure for cancer, and on the other hand it has been condemned as worthless by sceptics who have had no personal experience in its use, and are positively ignorant of its method of application, and know nothing of its effect.

Radium therapy until recently has been almost entirely devoted to malignant conditions, but much attention is now being given to the treatment of non-malignant diseases and various skin lesions.

The energy given off by radium consists of a radiation, and the liberation of a gas called the emanation and is said to be radioactive.

The definition of radioactivity as given by the Standard Dictionary is "the dynamic property found in certain bodies of high atomic weight, of spontaneously emitting peculiar and characteristic rays invisible to the eye and capable of penetrating objects opaque to ordinary light."

In order to understand the essential points of radium therapy it is necessary to have a knowledge of the physics of radioactivity. Radium is the third heaviest known element coming after uranium and thorium, and has an atomic weight of 236.

The radiation is made up of three distinct rays, alpha, beta and gamma rays. In therapeutics, the classification is of great importance, as the results of treatment depend largely on the class of ray used.

About 90 per cent. of the total radiation is made up of alpha rays. They have but slight penetrating power and are positively charged.

These rays are seldom used in therapeutics on account of their slight penetrating power and the readiness with which they produce burns. However, these rays are readily eliminated, a thin sheet of metal or even a few layers of paper being sufficient to stop them. These rays are given off with a velocity of 20,000 miles a second. One milligram of radium gives off 13,600,000 alpha particles a second.

Beta rays are made up of particles negatively charged, and travel with a velocity equal to light. These particles are about $\frac{1}{1000}$ of that of the hydrogen atom.

Beta rays form about 9 per cent. of the total radiation, but are not at all homogeneous, varying in their power of penetration.

Some are very little more penetrating than the alpha rays and are known as the soft beta rays; others called hard beta rays are extremely small and have great speed and power of penetration.

Between these extremes are what are called the medium beta rays, which range from the soft to the hard beta rays.

The gamma rays form only about 1 per cent. of the total radiation, but have great power of penetration. The gamma rays from 30 mg. of radium can be observed by an electroscope after passing through a foot of iron. They have a velocity equal to that of light, and are a pulsation of the ether, in this respect being similar to Roentgen rays, but they differ from them in their greater power of penetration.

M. Sagnac discovered that the gamma rays

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

on encountering matter produce secondary rays, similar to the beta rays. These are called "rayons de Sagnac" by the French.

According to Rutherford, 2 mm. thickness of lead is sufficient to absorb nearly all beta rays of radium.

Newcomet¹ says: "Wherever a chemical or physical change takes place, it is well known that it is always accompanied with some disturbance in the element of heat; in other words, heat is given off, or else there is an absence of heat, which causes the object to become what is commonly known as cold. This disturbance in the disintegration of these elements is manifested as heat. For instance, the amount of heat for 1 gram of pure radium is about 133 calories per hour; this becomes 1,160,000 calories in one year, which continues for the life of radium, which is 2,500 years; and therefore the total disintegration of 1 gram of radium would give off $1,160,000 \times 2,500$ calories equal to the burning of about 1,000,000 tons of coal." This amount of energy given off from a gram of radium are as follows (expressed in calories of heat per hour): alpha rays 123, beta rays 4.3, and gamma rays 6.5.

On account of the difference in the penetrating power possessed by the different rays, it is necessary to use screens of suitable material to eliminate the rays we do not desire to use in any given case. It is only very rarely that it is found desirable to use the alpha rays, as they are not sufficiently penetrating, and readily produce burns. When they are used, it must be for a very short period of time.

Metal screens have the double object of lessening the total amount of radiation and at the same time modifying the quality by filtration. The alpha and beta rays can be deviated by a magnet while the gamma rays are not affected by it. It is therefore possible to eliminate the alpha and beta rays by placing a powerful magnet behind the source of rays thus doing away with metal screens. This is not practical at this time, but it is one of the interesting problems of the technic which will no doubt be worked out in time.

Radium may be obtained for application in the form of varnish applicators or in hermetically sealed glass tubes, encased in silver tubes. A given amount of radium is mixed with a specially prepared varnish. This is evenly spread over a silver disk, so that each square millimeter contains a given amount of radium element, the standard being 1 gm. of the salt to each square millimeter of surface. This is designated

as full strength. Applicators may be had in "half strength" and also in "quarter strength."

The universal applicator is a glass tube in which any amount of radium desired is hermetically sealed. The glass tube fits into a metal tube with a screw cap. The metal case is made of silver or aluminum, usually 30 mm. in length, and about 4 mm. in diameter. The radium is packed tightly in the glass tubes so that its position is not altered on the movement of the tube.

Screens are made of different material, but aluminum and lead are commonly used, the first on account of its lightness and the second on account of its pliability. Lead screens can be rolled very thin and its pliability is an advantage in treating certain regions. In using radium, there is no loss of energy, as it is said that it will take 1,700 years for it to lose half of its strength. The radiation is being given off continually, whether it is being applied to a patient or locked up in a safe.

The effect produced by radium depends on the quantity used, the amount of screening, length of time of applications, the interval of time between applications, and other factors.

However, the most important factor is the matter of filtration. In every case a rubber filter, or one of a few sheets of paper must be used to eliminate the secondary rays which are very irritating, and are formed by the rays passing through the metal filters.

One important process is known as the cross-fire. It is very useful in practice and has many advantages. Two or more tubes of radium are placed at different points in such a way that the rays cross each other.

Radium has been used in medicine about twenty years, and it is now just beginning to take the place in medicine to which it is justly entitled. At first it was heralded as a cure-all, especially in cancer; then the pendulum swung to the other extreme, and it was pronounced worthless by men who in some instances had never had any personal experiences with it. The result obtained by the use of radium in some cases has been so pronounced in what has been considered hopeless, inoperable conditions, that it was impossible for the average member of the profession to believe reports made by some of our most eminent men, and they were received with incredulity. It must not be inferred that radium is a cure-all, for it is far from it; many failures being constantly met. Why some cases show so much improvement and others so little under similar conditions cannot be explained. Many cases failed to be cured

1. Radium and Radiotherapy, p. 65.

by radium, but it must be remembered that a very large percentage of all cases treated by radium have been those that were refused operation by the surgeon, or post-operative recurrences in which surgery could do nothing. Take as an example cancer of the uterus. Statistics show that only 50 per cent. of the cases coming to the surgeon are operable. With radium we can treat 100 per cent., as many of the most extreme cases are made more comfortable, having the pain, hemorrhage and odor controlled. In cancer of the uterus I have advised operation in every instance where I thought operation was possible, and have not resorted to radium in a single operable case except on the positive refusal of the patient to submit to operation.

My work with operable cases under these circumstances have been too limited and of too short duration to make any great claims in early cancer of the uterus, but up to this time my results have been so favorable that I do not feel justified in urging so strongly for the patient to submit to operation.

I believe when the time comes, and in my opinion it is rapidly approaching when hysterectomy for cancer of the uterus is entirely abandoned, no difference how early it is taken, and in its stead radium or the Percy cautery is used, we will accomplish much more for these unfortunate patients than we have been doing. I do not desire to be understood as believing that any large percentage of cancer of the uterus will be cured by these methods, but I am firmly convinced that these methods will yield much better results than we have ever had before.

Also, I have advised operation in every case of cancer of the breast when seen early enough. In two cases in which operation was refused I used radium with such good results that I am almost convinced that radium can be depended on in a great many cases, but I am trying to be conservative and have not as yet abandoned surgery in early cases. I shall continue to use radium in early cases that refuse operation, and hope some time in the future to report the results of my efforts.

Cancer of the rectum. Applications of radium to inoperable cancer of the rectum has relieved pain, and prolonged the life of the patient. I have under observation at this time a case of cancer of the rectum, who was pronounced hopeless by one of our leading surgeons, and refused operation about a year ago. He has improved so much under radium that he has returned to work and has no pain, and his bowels are in good condition. He is not cured, and it

is probable that he never will be, but the relief has been of inestimable benefit.

In epithelioma of the lips, face and mouth, radium is the treatment of choice, and the cosmetic effects are better than with any known method of treatment. It is safe, painless and efficient.

As I desire to call your attention to the treatment of nonmalignant conditions, I cannot devote as much time to the discussion of cancer as I otherwise would. In passing, however, I would like to say that there are many articles in current medical literature by Abbe, Kelly, Clark, Miller, Ransohoff, Boggs, Pancoast and others, showing that there can no longer be any doubt of the great value of radium in malignancy.

In taking up the treatment of non-malignant diseases, I shall give you the results of my personal observations in this very interesting field. Since beginning this work a little more than three years ago, I have treated four cases of goiter, all of whom were markedly benefited, and I believe I am safe in saying that two are cured. The high pulse rate and intense nervousness have subsided and the tumor has disappeared.

Uterine fibroids yield to radium treatment. Hemorrhage is controlled and the tumor decreases in size.

Burnham states that only about 5 per cent. do not decrease in size. Abbe was the pioneer in the treatment of fibroids with radium. He treated his first case in 1905, and the patient has remained well.

Kelly and Burnham² reported a series of twenty-one cases treated with radium alone. In all the cases the hemorrhage was completely controlled, and the tumor diminished in size. In eight of these cases the tumor entirely disappeared.

Ransohoff³ reported very interesting cases of fibroids treated with radium. He concludes by saying: "Except in unusual cases, radium or Roentgen rays should be the treatment of choice in uterine fibroids, and essential in uterine hemorrhages." My experience with the treatment of uterine fibroids has been too limited to make a positive statement at this time.

We frequently encounter idiopathic uterine hemorrhages, that is to say, we find uterine hemorrhage in which there is no discoverable pathological lesion. These cases will yield to a few treatments of radium. A tube of 25 mg. well screened is introduced into the uterus for about ten to twelve hours.

2. Kelly and Burnham: *Journal A. M. A.*, 1914, p. 623.

3. Ransohoff: *Lancet-Clinic*, 1916, cxv, No. 6.

Neuralgia. In the treatment of malignancy it has been noted that frequently the relief of pain was noted by the patient before there was any evidence of change in the diseased process.

From this observation, radium was used for the relief of other painful conditions. I believe it was Leonard of Philadelphia, who first called attention to the treatment of neuralgia with radium. It is impossible at this time with the comparatively few cases treated, to judge accurately as to the percentage of cures that may be effected with radium. These cases, like the cancer victim, has been the rounds of the medical men, the surgeons and the specialist before coming for radiation. Many of them have been injected with alcohol, the sinuses operated on, nerves resected, and ready to give up in despair.

If with radium we can give temporary relief and occasionally cure a case we are doing much for suffering humanity.

CASE REPORTS

CASE 1.—Mrs. B. was seized suddenly in the middle of the night with a pain in the right dorsal region extending down over the right ileum into the pelvis. This continued for four days and required hypodermics of morphin and atropin, together with counter irritations, poultices and applications of heat, with only partial relief. Ten mg. of radium lightly screened was placed over the most tender discoverable point in the dorsal region and left for two hours. As the husband was a physician, I will quote from a report he made to me: "When you used the radium on my wife I promised to report to you the results. One hour after the removal of the radium the pain gradually subsided, and after another hour she fell asleep and rested the remainder of the night. Since that date over four weeks ago there has been no return of the pain." In further report of the case I would say that there never was a return of the pain, and she lived for several months.

CASE 2.—J. L. G., Bedford, Ind., age 49. In the spring of 1913 he had a pain in the back between the shoulder blades, and as he expressed it, it started like the toothache and gradually increased until it became intolerable. He consulted many physicians without getting relief. He had eleven roentgenograms made of various parts of the body, chest, abdomen, etc., without locating the source of the trouble. Finally an eminent surgeon pronounced the trouble as being caused by diseased teeth, after having them roentgenrayed. Acting on this advice, he had six teeth extracted. When I first saw him he had pain starting from the dorsal vertebrae and radiating through the intercostals on both sides. He had excruciating exacerbations that

were unbearable. He was treated with 55 mg. of radium, applied to the points of greatest tenderness. In order to get the effect of the penetrating gamma ray, it was screened thoroughly. At intervals of about two hours the radium was shifted from one tender point to another. In the course of a week, he was given about 1,200 radium hours. He returned home early in July, and I have not seen him since, but a recent letter informs me that he has had no return of the pain.

CASE 3.—Mrs. S., age 72, has had neuralgia of the fifth nerve for several years. On account of the pain she became a morphin addict. The pain radiated down to the upper alveolar process, which was so sensitive that she could take nothing in the mouth, not even water without severe pain. The pain was so great she was unable to sleep at night. About one year ago she had two injections of alcohol into the nerve without relief. She was treated with 45 mg. of radium for a period of one hour. After the third treatment she received great relief. She now has received eleven applications, and is getting one a week. Whether this will be permanent or not, the relief has well repaid the effort and she is anxious to not miss a treatment.

CASE 4.—Mrs. K. suffered numerous attacks of influenza in 1907 and developed a catarrhal condition of the sinuses of the left side of the head for which she was operated on a number of times. During the third operation in the antrum the infraorbital nerve was injured. After this operation she suffered extreme pain for two years. She was treated with the Roentgen ray, but got no relief. In 1910 a resection of the nerve was done, producing paralysis of sensation; this gave some relief for five or six months. When sensation returned the pain returned also. The pain was continuous and there never was an intermission of more than an hour or two, then only by resorting to the use of anodynes. During the last three months prior to the use of radium it was necessary to give codein almost every night in order to produce sleep. The use of radium was begun April 18, 1916; 10 mg. being used for two hours, and no perceptible results noticed from this application. On April 23, 10 mg. was again used for two hours, and in twenty-four hours after this application the pain ceased for a period of forty-eight hours; then began lasting for twenty-four hours when the third treatment was applied on April 27. From this treatment to the next on May 3, the patient suffered only six hours. Treatment was taken at intervals from three to five days during May and June. Several applications of 25 mg. were used. She is having now only slight paroxysms of pain, which is easily bearable, and does not have to resort to any use of anodynes for relief. A re-

cent letter from her husband, who is a physician, says: "She seems to be getting along very nicely."

I am treating my first case of lupus erythematosus with radium. The case was recently referred to me by Dr. George Pendleton, and she has only had three treatments of one hour each with 25 mg. of radium. There seems already a beginning change in the lesion, but it is too early to make a prognosis, as it is well known that this is a disease very refractory to all forms of treatment, but good results from radium treatment have been reported. What the exact value of radium will be to medicine is a problem of the future. Improvements in technic are being constantly reported, and much is being learned by workers in this field. There are several other points I should like to take up but time forbids. In conclusion, I would say the great value of radium in cancer can only be judged by keeping constantly in mind the fact that only the hopeless inoperable, or the post-operative recurrences are sent for radium therapy. If we relieve a small percentage and occasionally cure a case which has been operated on or been refused operation on account of the seriousness of the condition, I would ask, have we not done much for suffering humanity?

DISCUSSION

DR. W. F. CARVER (Albion): I presume the general practitioner occasionally finds a case of intractable headache which he cannot account for, that is to say, he cannot find any pathology to account for the headache. I have a case in mind at the present time, a gentleman who has a persistent headache and has had it for the past six or eight years. No diabetes, no Bright's, no sinus trouble, no bad teeth—nothing determinably wrong, with the exception of a severe head pain which practically puts him out of business. He is a farmer, and ambitious, but he is unable to work more than half the time on account of headaches. I have wondered if there is any possibility that radium could be employed in any way to relieve that headache. It is mostly in the top and back of his head. I have gone as far as I can, and I have called in consultants with me, but we cannot find any pathology for the headaches. His eyes are good, but he just has headache. Do you think radium therapy would do him any good?

DR. MAURICE I. ROSENTHAL (Fort Wayne): I am in the embarrassing position of having to discuss a paper that I have not heard. I did not think it would be called so early. However, I have had some experience with radium and probably it would not be out of place to give what little I can.

I have been using radium for only a few months and in a surgical way. My understanding of the effect of radium in a medical way is that nothing can be expected from the use of radium waters that are supposed to contain radium as a result of radium emanation. The radium which has been used internally, intravenously or by the mouth, is prepared by actually putting into the water, in solution, the radium. So that after a person has taken a few doses the radium can be recovered in the feces and stools and perspiration, any of which is impossible in waters that are charged with so-called radium emanation. We conclude, therefore, that probably water charged by emanation is worthless. I have had no personal experience in the use of radium for internal medication.

I am using radium for the treatment of malignant growths, for fibroids, menorrhagia and metrorrhagia. Its use as an adjunct to surgery is almost indispensable in some cases. Take for instance a case of cancer of the uterus, a woman operated on four years ago by the radical method, which consisted of removing practically the vagina—not over an inch left—with the broad ligaments, close to the bone. This woman made a very beautiful recovery and remained well for a period of four years. Recently she returned with a carcinoma in the old scar. That is a rare thing in a radical operation with thorough removal. The rule is that the carcinoma does not recur in the scar. But in this case we had a recurrence in the scar in a position accessible only with difficulty by the Roentgen ray. We used radium in this case recently, and after the ordinary treatment this carcinomatous condition has evidently disappeared. In that class of cases there is nothing else to be done. Radium is your last resort.

Another case, a woman with an extreme degree of hematuria, diabetic, and with cancer of the uterus far advanced. In this case we used curettage combined with a cautery, using moisture so as to drive the steam into the cancerous tissue. This woman made a nice recovery from our palliative treatment. In the course of three months she returned with a hemorrhagic discharge. Now in these cases where there has been curettage or excochleation there is no further treatment; you cannot curet or burn any more. In this case we used 50 mm. of radium for twelve hours, then allowed her to rest twelve hours, again applying it twelve hours, for about seven days. As a result the hemorrhage stopped, her discharge stopped, and at the present time she is at least clinically well. That kind of case is beyond treatment by any other method of which we know.

To illustrate the effect in metrorrhagia, a woman came in having menstruated for two months continuously. The uterus was opened and curetted and after making careful diag-

nosis and careful microscopical examination, we found no malignancy. But that is not absolutely reliable. You may overlook a little carcinomatous area. However, there was no malignancy in this case. We made two applications of radium in the vagina, twelve hours each. Her menorrhagia has disappeared, she has menstruated once, but not profusely. Now this woman may still have a carcinoma, and she will be watched. But that is simply to illustrate what we may do with radium in some of these gynecological cases.

I have had very little experience with skin disturbances, but I have reason to believe that radium is very servicable applied externally in lesions of the skin.

DR. E. O. DANIELS (Marion): I have had no experience with radium—I have no radium—but I saw a case this summer at the Johns Hopkins Hospital that I think was one of the most wonderful results I have seen in medicine. A young man about 25, who came up there from Tennessee. He had marked edema and slight cyanosis of his head, neck and upper extremities, showing the effect of pressure upon the superior vena cava. He had a marked bulging of the sternum forward, and it was easy to see the large mass in the mediastinum—the Roentgen ray showed a large mass. He had been sick six months. Dr. Kelly gave him one treatment, and we saw this man three days afterward, and in that three or four days he was feeling better, and about four weeks after that we saw another Roentgen-ray plate that showed the mass diminished more than one half. His cyanosis and edema of the neck and arms was entirely gone and the fellow felt he was very much improved. They diagnosed this as lympho-sarcoma, mediastinal cancer, or Hodgkin's disease.

To me that was one of the most wonderful things I have ever seen, considering the utter hopelessness of the case.

DR. T. C. KENNEDY (closing): I did not report any of the cases of cancer of the uterus, for the reason that they have been treated such a short time that I did not think it worth while to put them in the record. I do not want to be over-enthusiastic in making claims I cannot substantiate. I have a case of cancer of the uterus under treatment at the present time and which has been refused operation. The cervix is badly involved and there is a mass in the vagina. I have given the woman two treatments and her hemorrhage has disappeared, and she has less pain. She is not well, and I do not believe she will be; but I believe we can make her comfortable.

I may also cite the case of a woman who had been operated on for cancer of the uterus with recurrence in a year that resulted in great en-

largement of the glands. I treated her with radium and the result is that the condition is very much better and the woman comfortable, but not well yet.

I recently treated a case for Dr. Spohn, cancer of the mouth, that was past all operation. I gave him several treatments, and Dr. Spohn told me he felt sure the man was going to get well. I hardly believe he will, because it was an extreme case; but we have been able to alleviate a great many of these cases which formerly we considered hopeless. In cases of cancer of the uterus I treat 100 per cent. of cases. I do not refuse any, no difference how bad they are. If we use too large a dose of radium or produce too rapid absorption, we get a toxic effect, and I believe it is possible to kill patients by doing the work too rapidly with radium.

One author—I do not remember his name—claims that he has proved to his own satisfaction that radium in breaking down a cancerous mass produce an antitoxin which goes through the body and may break down metastases in other parts. That is very valuable, and if we can do this we can accomplish more than just the local effect. But radium work is in its infancy. We do not begin to know what we can do with it, and it will be a long time before we do. But I have insisted on operation in every case that is operable. I have had several cases that absolutely refused operation—and we find these cases every once in a while—and I treat these with radium.

In regard to Dr. Carver's question, would say that we can apply the radium, but I do not believe it would do much good in his case. It does have a wonderful analgesic effect, though. The cases of *tic douloureux* I have spoken of I had no hopes of even relieving.

THE U. S. Department of Agriculture, in co-operation with the health and milk officials of a number of cities, is starting an active campaign against the unsterilized milk can, pail, strainer cloth, and separator, as contributing causes to high bacterial count in city milk. Health officers in 150 localities already have accepted the department's offer to demonstrate to their local milk producers a simple homemade sterilizer, costing not more than \$15, which if used on the farm will help guard the milk against this initial and serious contamination. The department has twenty of these sterilizers, and has offered to supply an outfit for a two-weeks' demonstration to any local health or dairy official who will agree to show it in operation to the milk producers in his section. For information address the U. S. Department of Agriculture, Washington D. C.

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EDITORIALS

INTESTINAL STASIS

The responsibility which inevitably accompanies leadership in any great field of human endeavor is indeed a great one. This is especially true of men who occupy such positions in the field of surgery, and who mold surgical thought and give direction to surgical procedures among the rank and file of the profession.

The great majority of surgeons are imitators, doing what the leaders do without a sufficiently close analysis of the fundamental principles upon which a surgical procedure must rest if it lives. This imposes a radical conservatism on the masters to the end that no mistakes be made to be multiplied a thousand fold by the men who of necessity must follow rather than lead.

In this respect it is interesting to note the influence of Lane's views on the problem of intestinal stasis. This leader by virtue of high attainment, has attempted to solve this problem by recourse to surgery of a very radical kind. The acceptance of views so radical on the part of many surgeons in America can only be explained by the peculiar psychologic impression which the evident modesty and deep sincerity of the man has made on his hearers.

However, there has accumulated much evidence, both clinical and experimental, to disprove the "sewerage" conception of the function of the colon, and to discredit any surgical procedure based on this conception. The mature judgment of these men who have had the courage to follow Lane into the field of radical colon ablation, is that at best such surgery is indicated only on the rarest occasions.

It is not because colectomy per se cannot be safely done. As an exercise in surgical gymnastics it leaves nothing to be desired, but judged by its ability to cure the victims of intestinal stasis, it falls far short of a successful operation.

The difficulty seems to be that these individuals are suffering from a peculiar combination of

organic and functional pathology, and to attack one without adequate realization of the part the other plays in the disability is an illadvised procedure.

In this connection the researches of Kieth and Alvarez are illuminating. On the basis of analogy in function between the cardiovascular and the gastrointestinal systems, both possessing substantial muscle tissue designed to automatically propel, in the one case the blood and in the other the contents of the bowel, they reasoned that both might be provided with identical apparatus for automatic muscular control.

His and Tawara had already definitely located the sino-audicular bundle or bundle of His, as the center of such control in the heart. His explanation of constipation and resulting stasis is that the chronically inflamed bowel wall found in these cases produces a constant irritation and stimulation of these nodal centers found to be present also in the bowel, which in turn results in chronic spasm of the bowel wall, hence constipation.

This conception of stasis is radically different from that upon which surgical treatment is based, and if proven to be correct will fortify the opponents of colectomy and fixation methods of treating intestinal stasis.

This brings us back to our original statement that leaders in surgery should be very careful not to predicate surgical procedures upon false hypotheses.

ELECTROTHERAPY

The application of electricity in one form or another for the relief and cure of disease already has produced very encouraging results. In many conditions of various kinds it has served as a very effective therapeutic agent, not only for the relief of symptoms but for an apparent cure of the disease. It cannot be regarded as a specific cure for any form of disease. Just how it acts is not yet fully known, and this is not at all surprising, for no one has yet explained just what the electric current really is.

Electrical stimulation of paralyzed nerves and muscles has long been known to be of the greatest value very frequently in helping to restore the function of the affected structures. In many instances of functional nervous disturbances, the so-called states of "nervousness," treatment by direct application of the electric current over the body here and there often seems to be very

helpful in restoring the normal tone and vigor of the body.

Since the discovery of the Roentgen ray, however, the advances made in the applicability of the electric current in treatment have been truly remarkable. The Roentgen ray is now used in many disorders of various types, and often with surprisingly good results. Just how these rays act is not really understood. The possibilities are that they may act in some unknown way directly on the cause of the disease, or that they may stimulate to greater activity the protective reaction of the tissues around the site of the morbid lesions, or that they may affect both the cause of the disease and the tissues around the lesions. Be that as it may, the experience already accumulated leaves no doubt as to the value of the Roentgen ray as a therapeutic agent.

Its value as an aid in clearing up certain skin diseases is quite generally known and appreciated. In acne, sycosis, eczema, psoriasis, lupus, the ringworm infections, and various other dermatoses, the Roentgen ray in some cases yields surprisingly good therapeutic results when used in association with the measures usually adopted in the therapy of those diseases. Before attempting to use the Roentgen ray in such conditions its indications and contraindications must be thoroughly recognized, for if used injudiciously much harm and even very severe injury may be done.

In the treatment of malignant disease, especially superficial epithelial growths of relatively slight malignancy, electricity in the form of the Roentgen ray also has yielded encouraging results. Although it cannot be denied that in some cases superficial epithelial growths have been made to disappear completely by the Roentgen ray, the most rational method of treating malignant disease of any sort, in the light of our present knowledge, is by complete excision of the malignant tissue. Only when such a procedure is impossible would it be wise to try out the effect of electricity.

In blood disorders, such as the leukemias, the Roentgen ray has been found to be of very great value in helping to prolong the life of the victim. Also, in various functional disturbances, such as indefinite pains and aches or other symptoms without an organic basis, perhaps mostly by its psycho-therapeutic effect, electrotherapy can very often be depended upon to relieve almost completely, if not quite so.

Certainly the addition of electrotherapy to our available methods of treatment has been a

distinct advance. By utilizing it properly one can do a great deal of good with it, but by using it improperly one can do a great deal of harm with it. He who undertakes to make use of it should know and understand what he is doing. He should know how to use it, when to use it, and when not to use it. Unless one understands this method of treatment and is qualified to proceed with it, it is advisable to keep "hands off."

LEGISLATIVE ACTION ON BILLS AFFECTING THE MEDICAL PROFESSION

The Indiana Legislature has adjourned and our readers may be interested in a synopsis of the action taken on all bills affecting the medical profession.

It may be noted that little was accomplished, and in fact there were few additions or changes in our present laws. The chiropractors were defeated in their efforts to secure a separate examining board, and the bill to codify the medical laws also was defeated. In the closing days of the session a bill appropriating \$350,000 for the medical department of the university was passed by both houses of the legislature, but the governor exercised his prerogative by refusing to receive the bill, and the university, therefore, fails to receive the much needed appropriation. The bill was favored by the governor when it was before the legislature, but the defeat of the excise tax law, which was an administration measure, led the governor to say that he must veto the appropriation because the failure of the excise law leaves the treasury empty and the appropriation could not be made.

The Indiana State Tuberculosis Association succeeded in getting through two bills, the first one being an amendment to the old tuberculosis law, correcting it in two particulars: First, the section requiring reporting of tuberculosis cases was so worded that if the case was not reported within the first few days, it need not be reported at all; Second, the section detailing how disinfections should be performed required that it be done by the old formaldehyd method, and as formaldehyd gas does not destroy tubercle bacilli or other acid fast bacteria, that section also was faulty. The two sections were corrected. The other bill passed was the one which now makes it possible for counties that desire to do so to build tuberculosis hospitals. Under it, two or more counties may join together.

The appropriation for public health purposes was increased \$11,000, but the all-time health officer bill and the compulsory medical examination of school children bill both were defeated. It may be interesting to note that one of the opponents voted against these bills because, as he said, "the State Board of Health condemned the school house in our town and it cost \$40,000 to build a new one." Other reasons for the defeat of the bill, as expressed by legislators, were equally as senseless.

A bill which did get through was one which gives power to health officers to condemn insanitary and dilapidated houses which may be used for dwelling places.

Bills that were defeated or for other reasons failed to become laws were as follows: health insurance; dividing the state into health districts; providing for expenses of health officers; affecting company physicians and fees for services; regulating venereal diseases; further prohibiting sale of habit forming drugs; the bill aimed at the medical profession and extending terms of food and drug act, as it pertains to labeling, to physicians; requiring health certificates with application for marriage license; and the bill providing training schools for tuberculosis nurses. The joint resolution authorizing the Indiana University president and trustees to enquire into any reputed useful means to treat disease, for which unusual merit is claimed, and to report to the governor not later than Jan. 1, 1918, was passed by the house and probably will be acted on by the university regardless of the senate's failure to take action.

The regular medical profession succeeded in preventing the enactment of any legislation damaging to public health or medical practice, but failed to secure some legislation that is needed. It is unfortunate that the bill to codify the existing medical laws was not passed, but it is greatly more unfortunate that the appropriation for the medical department of the university was defeated through the action of the governor. The medical school now has no home, and the failure of the legislature to provide means for one and for further maintenance of the school is a serious blow to medical education in the state.

On the whole, however, we are fortunate that things are no worse; for considering the nature of our legislature and the unsystematic, unbusiness like and absolutely senseless way in which they attack most work before them, it is a wonder that we escape much vicious legislation, or that we get as much real construc-

tive legislation on our statute books. Let us hope that the new constitution, which seems to be in sight, will provide for a more rational operation of our legislative body. Also let us hope that the regular medical profession will begin now to organize as a working body of politicians bent upon securing, two years from now, legislation pertaining to medical practice and medical education which is sorely needed, not alone for reputable and well-trained doctors, but for the benefit and protection of the public.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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We want THE JOURNAL to serve YOU.

THE Indiana legislature has adjourned and everybody breathes a sigh of relief. No matter how many good laws are put on the statute books, it is a certainty that there also will be added some very pernicious legislation. The last session was no exception to the rule.

WE are pleased to call attention to a new quarterly journal, *Endocrinology*, the official organ of the Association for the Study of the Internal Secretions, the first issue of which has recently come from press. Dr. Henry R. Harrower, Glendale, Calif., is the editor, and the quality of the first number speaks well for the success of the undertaking.

AGAIN it has become difficult—almost impossible—to secure salvarsan and neosalvarsan. But we should worry! Salvarsan is now produced in our country under the name "Arsenobenzol," and can be had cheaper than the German product. Its toxicity is said to be very much less than salvarsan, and its therapeutic effect just as good. Therefore, no one need be alarmed even if the supply of the German product is cut off altogether. We are prepared to take care of our demand for this drug with our own product made in an American laboratory by American physicians.

THE women of Indiana will vote at the next election. Let us hope that they make no worse job of it than the men. Let us hope, also, that the sensible and thinking women of the state exercise the right recently bestowed and not leave all to the frothy advocates of woman suffrage who have been kicking up so much disturbance by their intense partisanship and ill-timed threats.

THE *Radium Quarterly* is a new journal devoted exclusively to radium therapy, published by the Radium Institute of Chicago. The first number came from the press in January, and contains articles by Dr. Frank E. Simpson of Chicago and Dr. Gordon B. New of the Mayo Clinic, Rochester. The illustrations are clear, and mechanically it is good looking. This new publication should be of interest to those physicians who are especially interested in radium therapy.

SURGICAL instrument houses offer little encouragement as to any amelioration in the present high cost of surgical instruments and appliances. Some houses are now sending out notices that in all probability the present high prices will not only continue, but become greater as time goes on. They also state that, considering the present condition of the market, they will not accept any orders for instruments on approval, and will not permit any customer to return any instrument for credit.

A NEW YORK grand jury recently refused to bring an indictment against a Christian Science healer who had been held on the charge of culpable neglect following the death from tuberculosis of a young girl of 16, the coroner holding that the healer had been negligent in failing to report the case to the department of health. It was contended by the healer's counsel that Christian Science healers do not pretend to diagnose cases and are under no obligations to report them. And yet these fakers are permitted to continue their damnable practice!

THE Arkansas Medical Society is following the plan of the Kentucky Medical Society in its 1916 meeting in arranging a program for the 1917 meeting (at Little Rock) composed entirely of home talent. It is their intention to have every county in the state represented on the program, and we believe that this plan will create a more staunch support of the society by its members, more loyal attendance at the annual meeting, and a keener interest in the purely scientific side

of the meeting. Aside from this, it cannot help but develop the capabilities of the rank and file along the lines of oratory, to say nothing of scientific research.

THE prejudice against vaccination as a preventive of smallpox still exists to such an extent in Pennsylvania that at practically every session of the legislature some bill pertaining to the same comes up for action. At this session an antivaccination bill with the following amendment has been brought up and referred to the Committee on Education.

"Or if it is shown by the sworn certificate of a regular practicing physician that the health or physical condition of the child is such that vaccination would endanger the life or health of the child but that the child is free from any contagious ailment or affection such child shall be permitted to attend school until such time as it may be vaccinated without danger to its life or health when the provisions of this section shall be enforced."

IN the closing days of the last Indiana legislature many of the newspapers of Indiana published a digest of the public health bills pending, and in connection therewith used a portrait legended as being a picture of Dr. J. N. Hurty, the capable and efficient secretary of the Indiana state board of health. Dr. Hurty perhaps would not take a prize at a beauty show, but the homely, sickly and cadaverous looking individual featured by the newspapers had little resemblance to our esteemed secretary of the state board of health. Can it be possible that some one with evil intent furnished a false representation of that very active gentleman, with an end in view of accomplishing the defeat of some of the public health measures? Certainly some of the pictures as published were enough to kill most anything.

OF especial interest to the medical profession is the publication of a new monthly journal to be known as *The Journal of Urology—Experimental, Medical and Surgical*. This journal has been founded with the intention that it shall become the archives in the United States for papers dealing with the urinary tract and correlated subjects. Heretofore there has been no special journal in which advances along this line might be recorded, but have been scattered here and there in various publications. The first number came from press in February. Dr. Hugh Hampton Young of Baltimore, is editor, with an executive editorial committee composed of some of the best men of Johns Hopkins, Harvard, Leland Stanford Jr., Pennsylvania,

Yale, Michigan, Columbia, Minnesota, George Washington, Cornell, Northwestern, and Post Graduate. It is published bimonthly by the Williams & Wilkins Company, Baltimore.

CONSIDERABLE activity among the medical profession of Indianapolis in the Red Cross Association has developed. Three important events have occurred looking toward organization in this work. Most important was the gift of \$25,000 by the Eli Lilly Company for the establishment of a Red Cross base hospital. This money is to be spent for the purchase and storage of complete equipment for a 500 bed hospital which in case of war is moved into a building furnished by the government at any place needed, the government to assume the responsibility for its operation. The second event was the appointment of a committee to cooperate in the organization of a staff of physicians and nurses for this hospital. The third event was the organization of a group of physicians to give Red Cross instruction in a series of fifteen lectures to classes of women organized under the direction of various women's clubs of the city. When these plans are carried out it makes Indianapolis a thoroughly organized community for medical service in case of war.

THE American Society for the Control of Cancer have issued a special bulletin in which they call attention to the fact that nurses, especially those engaged in public health work, can do much to prevent unnecessary death from cancer, and urge the aid of the nurse in teaching the public the need of early treatment. It is pointed out that many patients, especially women, will speak to a nurse about the danger signals of this disease, such as lumps, persistent sores, ulcerations, and other irregularities, when they would hesitate to call a doctor; and attention to these apparently trivial conditions often means the actual prevention of cancer, or at least its discovery in its early stages when the hope of cure is greatest. The American Society for the Control of Cancer has obtained the cooperation of national, state, and local nurses' associations in promoting special education of nurses along this line, and all the leading schools of nursing have been urged to provide special lectures on the early signs of the disease, so that nurses, when they take up their professional work, may be equipped with the necessary knowledge, not to make a diagnosis themselves, but to see that people with suspicious symptoms receive prompt and competent professional advice.

It was not at all surprising to note that a bill was introduced recently by a legislator of one of the northwestern states requiring every appendix removed by operation to be sent to the state laboratory for examination, and if an appendix was found not diseased the patient would not have to pay for the operation. A step of this kind is significant. It shows plainly which way "the wind is blowing." No doubt the author of this bill has had his appendix removed although it was not diseased, or he knows of people who have gone through the same experience. No one knows better than the medical profession that there are many unnecessary operations, especially for the removal of the appendix, being done right along, just as we know that many necessary operations are not being done when they should be done. Unfortunately there are in our profession unscrupulous physicians and fee-splitting surgeons who consider their need for "business" first and the welfare of the patient second. That element ought to be eliminated from our midst, and the sooner the better. If the reform does not come from within, it inevitably will come from without. The people have begun to see and to understand, and when they will have seen enough they will act. Why don't we act first?

NOT the least of the foes which help to burden the life of the soldier in the trenches of the battlefields of Europe are the animal parasites which feast upon him. Expedients of every sort have been tried to rid the armies of this pest. The strict cleanliness which excludes it from civilians and their households is, of course, impossible at the front, and chemical agents must be depended upon to destroy the parasites or prevent their invasion. Many of these chemicals have been found impracticable on account of unpleasant physical characteristics, but the *New York Medical Journal* of February 10 states that an Italian physician, Dr. Alfonso Muto, advises that a 10 per cent. solution of creolin is the ideal chemical agent for this purpose. The clothing to be treated is placed in a wardrobe, the interior of which is connected by a pipe with a boiler containing the creolin solution, which is then boiled, the vapor permeates the wardrobe for about fifteen minutes and is then turned off. A quarter of an hour later the clothes are removed. They are unharmed by this process, the odor is not disagreeable, and the protection lasts for some little time afterward as the process leaves minute crystals of naphthalin on them and these have a prophylactic effect.

The chiropractors again have met their Waterloo. The Nemesis of this group of misguided individuals is the Chairman of the Legislative Committee of the Indiana State Medical Association. We doubt if the medical association of any other state in the Union is blessed with the shrewd, able leadership which characterizes this department of the work of our state association. Simply being on the right side of the question is not sufficient for successful accomplishment when dealing with a legislative body. It requires knowledge of legislative technic, political currents and cross currents, tenacity and a willingness to be always on the job. The original chiropractors' bill as amended would hardly be recognized by its authors. It permits them to practice after qualifying as any other individual has to qualify in order to treat the sick in this state. It will be cold comfort for the chiropractors to know that they can be licensed to practice in Indiana by showing that they possess something more than a fine gilt sign and an abundance of self-assurance. The next thing in order is to see that the law governing the practice of medicine is enforced.

STATE ASSOCIATION PROGRESS. Slowly but surely all of the county medical societies are beginning to appreciate the worth of a central executive secretaryship bureau. When this department was opened at Indianapolis in December only about one-fourth of the county societies apparently gave it complete cooperation. However, it was not long until the various societies saw the good that might be accomplished from this department if the proper cooperation was afforded it, and we have progressed now to the place where more than one-half of the county societies give us immediate cooperation. Of course, this is very poor, as we shall not have a great deal of influence until every county joins in the work actively, but the progress gives us a basis for encouragement.

The happiest day we have had was Tuesday, February 20, when, on the call issued by President John H. Oliver, fifty-two representatives from various county medical societies came to this office to assist in bringing pressure at the Legislature. The office was filled and overflowing, and the men seemed to take an active interest in the affairs of the association. They came from all parts of the state and with the one purpose of making the Legislature feel that the physicians were awake.

We are well aware of the fact that with proper and complete cooperation this department can be of immense assistance to the profession, but without the full response on the

part of the members it will be useless. We want you to call on us whenever we can be of service and we hope that your devotion to the association is such that each member will make such personal sacrifices as are necessary to promote the best interests of the profession.

FREDERICK E. SHORTMEIER, Exec. Sec.,
308 Hume Mansur Bldg., Indianapolis.

"ANESTHETICS, antiseptics, prophylactics, reciprocity, professional titles and the medical practice act were discussed at a conference of members of the Ohio State Medical Board and a committee of the Ohio State Osteopathic Association in Columbus, January 2," says the *Ohio State Medical Journal*. The osteopathic committee, through an attorney, presented three requests, namely (1) that the office of the board use the title "Osteopathic Physician" when referring to an osteopath in correspondence with insurance companies, the federal authorities, the state industrial commission and other firms, associations and governmental bodies; (2) that a "broader interpretation" be given the section of the law relating to the use of drugs by osteopaths (the committeemen admitted that osteopaths are using drugs in obstetrical and minor surgery cases); (3) that the board's rules regarding reciprocity be modified so that recognition may be given examining boards composed entirely of osteopaths as well as those made up of physicians and osteopaths. In reply to the above, the board gave the following opinions: There is nothing in the medical practice act which gives them authority to address osteopaths as "osteopathic physicians." They are not registered as physicians, they are not required to take a physician's examination, and should not be permitted to masquerade under a physician's title, even if the title is qualified by the word "osteopathic." In regard to the second request, the committeemen in admitting that they at present were using drugs in obstetric and minor surgical cases, excused themselves by saying that they did not care to use drugs as therapeutic agents, but contended that the osteopaths should have the same right to use anesthetics in practicing osteopathy that the dentists now have in practicing dentistry. The board cited that a specific statute gives the dentist the right to use anesthetics, and suggested that legislative action might be necessary in their case; but held that the law as it now stands is direct and emphatic on the point that osteopaths "shall not be permitted to prescribe or administer drugs." These so-called "drugless healers" of the various cults are growing more and more

bold in their requests and demands, and if permitted to go on without the check of a restraining hand by the medical profession, soon will be usurping all the rights and privileges of the regular profession without paying the price of an adequate education and training.

FROM the *Pennsylvania Medical Journal* we quote the following:

"An editorial in *The Journal of the Michigan State Medical Society* says that 'The public appraises us as a group by the impression conveyed to them by the isolated acts of the individual,' gives instances where physicians in that state have injured themselves and dishonored the profession by "'farming" cases that come to doctors under the provisions of our Workmen's Compensation Act,' and closes with the following paragraphs:

"True, these are but three isolated instances. Many similar cases exist and the sad part is that repetitions are occurring with increased frequency. Corporations, factories, firms and insurance companies are not asleep and unscrupulous doctors, yes and there are some who occupy prominent positions in communities, need not delude themselves that they have in the Compensation Act a medium for 'easy picking' among employers of labor. Claims are being investigated and it is sometimes surprising how these keen and alert investigators 'dig up' facts.

"We intend this as a warning and regret its necessity. If we desire fair treatment we must play fair, act fair and be judged honest as individuals for we, as a profession, are being judged by our individual acts. To persist will mean that these business men will stack their collective influence against ours when we appear before legislative committees."

"The great majority of Pennsylvania physicians when treating injured workmen are anxious to give both the workman and his employer a square deal, but occasionally one is found who overreaches himself and discredits the profession. Not a few of our physicians have had reason to complain of the treatment received by insurance and casualty companies, but it is hoped that none of these companies have found any of us physicians neglecting injured workmen or charging more than a reasonable fee in any case. A few years ago the commissioners of one of our counties discontinued the plan of allowing the indigent poor to select their own physicians and 'farmed out' the county work to the lowest bidder for each township and borough. When the medical society for that county objected it was shown that one officer of that society had charged the county just double the fees in a protracted case that he had charged one of the commissioners for a like service. Surely 'none of us liveth to him-

self.'"—*Pennsylvania Medical Journal*, February, 1917.

The Michigan and Pennsylvania medical professions are not the only ones who have these "black sheep" in their midst. A few of them exist here and there in Indiana, as well as every other state in the Union, and it is the medical men who have permitted selfish mercenary gain to overshadow the high calling of their profession who are thus bringing dishonor and discredit to the profession as a whole. When these men get a vision of their work as a profession and not merely a trade for the gain of dollars and cents, then and only then will such deception be done away with. But while we are on this subject let us say that doctors as a class are more sinned against than sinning. They seem to be the natural prey of the unscrupulous, and where here and there a tricky and dishonest doctor takes advantage of an insurance company or the provisions of some compensation act, many more instances may be found where the insurance companies and the provisions of compensation acts have worked to the disadvantage of the doctor, and with utter disregard of the justice due him. That there are rascals in the medical profession we admit—no profession or calling is without them—but the rank and file in the medical profession suffers from imposition of many kinds that unfortunately masks under laws or "rules and regulations" that though unfair, even dishonest in exaction, must be accepted by the easy going doctor. When an insurance company or some other company or corporation "stings" a doctor it is merely shrewd business; when a doctor "stings" an insurance company or a corporation—and he rarely gets a chance to do it—the act receives much criticism and is proclaimed as dishonesty of the first water.

DEATHS

W. A. JOHNSON, M.D., Cambridge City, died February 7, aged 56 years.

GEORGE F. ADYE, M.D., Newtonville, died February 7, aged 79 years.

ALEXANDER C. SPENCER, M.D., died February 7 at his home 9 miles north of Bloomington, aged 65 years.

PHILIP G. FOUST, M.D., formerly of Santa Fe, died February 21 at his home at Somerset, from pneumonia.

MARY A. MAVITY, widow of the late Dr. James S. Mavity, died February 27, at the home of her daughter in Lafayette.

SAMUEL V. WRIGHT, M.D., died at his home at Greensburg, February 10, aged 70 years. He was a graduate of the Cincinnati College of Medicine and Surgery.

AMELIA A. DICKINSON, M.D., assistant physician at the Southern Indiana Hospital for the Insane, died February 9, from pneumonia, aged 44 years. Dr. Dickinson had been with the hospital since last October. The body was shipped to her home in Maine for burial.

CHARLES H. WALDEN, M.D., died January 29, at his home at New Market, following a two months' illness from tuberculosis. He had practiced at New Market for many years, and was a member of the Montgomery County Medical Society and the Indiana State Medical Association. Dr. Walden was 63 years of age.

CLARENCE ABBOTT, M.D., died February 12 at his home at Otwell after a six weeks' illness from cancer of the liver, aged 46 years. Dr. Abbott was born in Jefferson Township, Pike County; received his early education from the county schools and the Southern Normal College at Princeton, and graduated in medicine from the Kentucky School of Medicine, Louisville, in 1898. He began the practice of medicine at Otwell at once, where he continued until his health compelled him to abandon it several months ago. He was held in high esteem in his community, and was a member of the Pike County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIAM A. HUNT, M.D., died February 23 at his home in Evansville, of bronchial pneumonia. He was 75 years of age, and was born in Warrick County, Indiana, Sept. 26, 1841. Graduated from a business college in Poughkeepsie, N. Y., in 1866; attended Bellevue Hospital College during the years 1872 and 1873, and took up the practice of medicine at Millersburg, Ind., where he remained practicing until four years ago at which time he removed to Evansville. Dr. Hunt was a member of Vanderburg County Medical Society and the Indiana State Medical Association at the time of his death, and had been a member for many years. He was a hard student and took courses in postgraduate schools in New York and St. Louis.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

GENERAL

THE new Witham Memorial Hospital at Lebanon was opened for patients February 7.

DR. C. R. NETHERTON has relinquished his practice at Winamac and located at Chicago.

DR. G. W. H. KEMPER of Muncie spent a part of February at the Mayo Clinic, Rochester.

DR. GEORGE E. REYNOLDS of Columbus recently underwent an operation upon one of his eyes.

THE Arkansas legislature has appropriated funds for the erection of a new State General Hospital.

DR. and MRS. J. M. BEAUER and daughter of Indianapolis have been touring the western states.

THE physicians of Kendallville entertained their wives at a banquet at the Gawthrop Inn recently.

DR. O. M. FLACK of Boswell entertained the members of the Benton County Medical Society in January.

DR. C. C. HICKMAN, who practiced medicine at Yoeman for a number of years, has located at Remington.

DR. and MRS. FRANK E. ABBETT of Indianapolis returned March 1 from a month's stay at Palm Beach, Fla.

THE Witham Hospital at Lebanon is to have a new elevator installed, the gift of the business men of Lebanon.

DR. W. A. THOMPSON has resigned as health commissioner of Liberty after a service of seven and one-half years.

THE nine-hour workday measure for employees of pharmacies was defeated in the Senate by a vote of 35 to 5.

FIRE at Newcastle February 6 destroyed the offices of Dr. Julius E. Hiatt, Dr. E. K. Westhafer and Dr. G. H. Smith.

DR. EDWARD D. FREEMAN of Osgood, Ind., was married February 8 to Mrs. Olive Bevan Townsend of Norwood, Ohio.

DR. T. W. KELSEY of Attica has received the appointment of intern to the eye service at Bellevue Hospital, New York.

THE Chiropractic Bill presented to the Missouri state legislature was defeated on January 19 by a standing vote of 58 to 56.

THE City Board of Health of Indianapolis has authorized the purchase of new Roentgen-ray equipment for the City Hospital.

DR. GUY P. LEVERING of Lafayette, who was confined at St. Elizabeth Hospital with pneumonia, has made a satisfactory recovery.

THE Sacred Heart Hospital at Garrett is undergoing repairs and remodeling. It will be thoroughly modern and contain sixty beds.

DR. B. G. DUPRAY, formerly of the Lakeside Hospital, Cleveland, has located in Fort Wayne, with offices at 218 West Washington Street.

A GIFT of \$1,000 to the Methodist Hospital, Indianapolis, as a memorial to his wife, was made recently by William N. Bowers of Cutler.

DR. MARY A. SPINK, medical supervisor of the Dr. W. B. Fletcher Sanatorium, Indianapolis, spent the month of February at Orlando, Fla.

THE first county hospital built under the state law was the Jasper County Hospital at Rensselaer, which was opened January 19. This hospital is modest in its proportions, but very complete, and the entire cost was about \$20,000.

DR. S. A. SHOEMAKER of Bluffton gave a lecture, February 6, on Mastoiditis and Middle Ear Diseases, illustrated by the stereopticon, before the Wells County Medical Society, physicians from nearby counties, and the public in general.

DR. and MRS. ALBERT E. BULSON, JR., and daughter, Miss Geraldine, of Fort Wayne, spent a part of February at Long Key and Miami, Fla.

PHYSICIANS of Winchester have been troubled with burglars who have been entering offices and carrying away cocaine, morphin and other drugs.

THE hospital at the West Baden Hotel was damaged by fire on February 11. No lives were lost, and the damage is estimated at about \$25,000.

DR. ALFRED HENRY of Indianapolis was re-elected president of the Marion County Society for the Prevention of Tuberculosis at their recent annual meeting.

DR. ARTHUR E. GUEDEL of Indianapolis recently suffered a dislocation of his right knee through the back-firing of his engine while cranking his automobile.

DR. H. W. SMELSER of the 1916 class of Indiana University School of Medicine has been appointed county physician at Connersville, Fayette County, for the year 1917.

THE Indiana chiropractors lost out in their fight for the adoption of their bill before the legislature for the establishment of a separate board of examiners for their cult.

THE tenth annual meeting of the Indiana Sanitary and Water Supply Association, in affiliation with the Indiana State Board of Health, was held at Indianapolis, February 14 and 15.

NEW YORK is to have another coeducational medical school through the recent vote of the faculty of the Long Island College Hospital that women students be admitted on the same terms as men.

THE medical women of Chicago arranged a week of clinics and entertainments, February 12 to 16, to which all medical women of the state of Illinois were invited. The week was both scientifically and socially profitable.

DR. ALFRED HENRY of Indianapolis was elected president of the Indiana Society for the Prevention of Tuberculosis at their recent annual meeting held at South Bend. Dr. Roscoe L. Sensenich of South Bend is vice-president.

DRS. C. P. COLBURN, Frank Harold and Joseph H. Kinsey have been named members of the advisory board of the Reid Memorial Hospital, Richmond, to succeed Drs. R. D. Morrow, R. J. Pierce and George B. Hunt. The hold-over members of the board are Drs. George R. Hays and R. S. Schilling.

DR. FREDERICK C. ECKELMAN of Elkhart has presented to that city his home, valued at \$15,000, to be used as an art gallery and museum. Dr. Eckelman is to be permitted to continue its use as a residence as long as he lives.

DR. WILL C. MOORE, formerly of Anderson, who has been in Germany and Austria in hospital service the past six months, will remain for another six months and will be located in Reserve, Sital No. 8, Johann Hoffenmaphatz 30, Vienna.

A BILL appropriating \$250,000 for a national sanatorium for lepers has been passed by the house of representatives and the senate. The institution will be in charge of the public health service, and officers detailed to the work will be allowed pay and a half.

DR. B. R. KIRKLIN of Muncie announces the removal of his offices from the Home Hospital to Suite 209, Western Reserve Life Building (Vatet Building), and states that his practice will be limited to roentgenology, syphilology and genito-urinary diseases.

THE new Bartholomew County Public Hospital, located at Columbus, was opened February 6. This hospital has been built and equipped at a cost of approximately \$100,000 and it is one of the most modern and best equipped hospitals in the state.

DR. M. H. KREBS of Huntington has recently passed an examination for position in the medical corps of the United States Army and will receive the rating of first lieutenant. Dr. Krebs attended the instruction camps at Ft. Sheridan and Fort Plattsburg, N. Y.

DR. WILLIAM MABON, superintendent of the Manhattan State Hospital, Ward's Island, New York, and emeritus professor of mental diseases in the University and Bellevue Hospital Medical College, New York, died February 9, from pneumonia, aged 56 years.

DR. CARL VIEHE of Evansville has been appointed member of the City Board of Health to succeed Dr. W. R. Cleveland who resigned because of ill health. Dr. Cleveland is at Asheville, N. C., for his health, and his stay there is indefinite.

MEMBERS of the Bartholomew County Medical Society enjoyed a banquet at the St. Denis Hotel, Columbus, on February 13. Dr. George T. McCoy presided, and after the dinner Dr. C. F. Neu of Indianapolis presented a paper on Nervous Conditions Produced by Goiter.

DR. H. O. BRUGGEMAN of Fort Wayne, who was on his way to New York to take ship for Europe for service at a hospital post in Vienna when the break with Germany occurred, has been recalled and will remain in America. Before returning to Fort Wayne Dr. Bruggeman took some postgraduate work at Johns Hopkins.

NICHOLAS MURRAY BUTLER, president of Columbia University, in his annual report has asked for an endowment of \$12,000,000 to be used in creating a great medical center. In addition to this, he asked for an endowment of \$6,000,000 for the dental school which has recently been established.

THE Fayette County Medical Society met at a banquet at the Hotel McFarlan, Connersville, on February 13. Following the banquet a business session was held, at which time the schedule of fees charged by the physicians of the county was discussed and, because of the advanced cost of living along all lines, some of the fees were raised.

THE Ross Chiropractic College of Fort Wayne is defendant in a \$10,000 damage suit brought against it by Jennie Liebreinz, widow of the late Fred Liebreinz. The complaint sets forth that the deceased had taken treatment from an inexperienced student and that an injury to the spine, resulting from the adjustment, caused the death.

THE Provident Hospital at Pennville, under the management of Dr. Charles E. Caylor, has just issued a 1917 Year Book. The 1916 report shows a total of 213 operations performed during the year: 4,462 office calls; 1,087 outside calls, 42 obstetrical cases, and 17 medical cases cared for.

A CAMPAIGN to raise a fund of \$115,000 for the purpose of enlarging the surgery department and the building of a new wing for the Methodist Hospital at Indianapolis has been started. Fifty-seven thousand dollars of this has been assigned to the Indianapolis District and the balance has been apportioned to the several other Methodist conferences in Indiana.

DURING February the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Merck and Company: OPTOCHIN, OPTOCHIN HYDROCHLORIDE.

E. R. Squibbs and Sons: TABLETS SODIUM CHLORIDE AND CITRATE-SQUIBB (Dr Martin H. Fischer).

DR. JOSEPH RILUS EASTMAN of Indianapolis, who has been in charge of an army hospital in Vienna, and who started for America just before the break with Germany, has been detained in Copenhagen with two assistants and not allowed to leave until request is made by American officials through the minister at Copenhagen. A cablegram from Dr. Eastman indicates that his situation is somewhat serious.

DR. PHILIP SKRAINKA of St. Louis severed his connection with the Interstate Medical Journal, of which he has been editor for the past six years, and will edit a journal of his own, Medicine and Surgery. It is announced that the new journal, aside from being of a high scientific order, will have clean advertising pages, carrying nothing that is not of the most approved type.

THE report of the treasurer of the Committee of American Physicians for the Aid of the Belgian Profession for the quarter ending Feb. 28, 1917, shows that to date the total receipts amount to \$7,961.26, and the disbursements (covering 1,625 standard boxes of food at \$2.20, 1,274 standard boxes of food at \$2.30, and 353 standard boxes of food at \$2.28) amount to \$7,310.04. This leaves a balance in the treasury of \$651.22.

A BRANCH sanatorium of the Battle Creek Sanatorium is to be located at Winona Lake, according to an announcement made by Dr. Kellogg. It will begin operations during the coming summer, and will occupy the present building of the Winona Hotel. The institution will be under the personal direction of Dr. Kellogg and a corps of helpers from Battle Creek. A health school will be conducted in connection.

AT a meeting of representatives from Steuben, Noble, LaGrange and DeKalb counties, held at Auburn recently, a Tuberculosis Sanatorium Association was formed for the purpose of building a joint sanatorium for the tuberculosis patients of these counties, and to aid in the campaign against tuberculosis in the state of

Indiana. Drs. Thomas Creel of Angola and J. A. Moore of Albion are among the officers of the new association.

THE Board of Health of New York has adopted an amendment to the sanitary code stipulating that every eating place in the city shall procure a permit from the commissioner of health. Heretofore this permit system has been used with great success in the control of the milk supply in that city, and as applied to hotels and restaurants is already in force in Chicago, St. Louis, San Francisco, and other cities.

ELI LILLY & Co. of Indianapolis, manufacturers of pharmaceuticals and biologicals, have published, for the benefit of the medical profession, a brochure on Biological Therapy. The booklet deals with specific vaccine and serum therapy, and contains an index of diseases in which antitoxins, serums and vaccines (bacterins) have been successfully used either as prophylactic or phylactic agents, and a priced list of the Lilly biologicals. The booklet is attractive in appearance, of convenient size, and should be of value to physicians. This little manual was prepared for free distribution, and will be sent to physicians on request.

FOR his firm stand on improvements proposed for the Indiana University School of Medicine Governor James P. Goodrich was presented by the students of the school an engraved card with the following inscription, bearing one hundred signatures: "We, the undersigned students of medicine, wish to express our most hearty appreciation of Governor James P. Goodrich for his statesmanlike grasp of the needs of medical education and for his leadership in rescuing the same in the present state crisis by advocating an adequate equipment for the Indiana University School of Medicine."

THE Eli Lilly & Company of Indianapolis have offered to the American Red Cross \$25,000 for the equipment of a bast hospital of 500 beds in case this country is drawn into war with Germany. The gift is a memorial to Colonel Eli Lilly, and one of the provisions of the gift is that it is to help Indiana medical men and surgeons to realize their ambition to be of greatest service to the nation in event of war, and that it is offered with the hope that they will provide the hospital unit staff necessary to operate the hospital. The entire equipment will be at the command of the Red Cross, ready to be moved to any point desired.

THE Medical College of Virginia and the medical department of the University of Virginia have inaugurated courses in military training which will consist of thirty-two lectures by United States army officers. The course will be compulsory to senior students, and regular attendance required, but the results of the examinations at the end of the course of lectures will not be counted against the students on their final marks for graduation. It is probable that the course will be extended to include all classes in the future.

A PRIZE of \$300, from the Alexander Graham Bell Grosvenor Memorial Fund, has been offered by the American Association to Promote the Teaching of Speech to the Deaf, for the essay, treatise, or other form of composition that most clearly details how a mother can best teach and train her deaf child in the home from infancy to school age. In case the judges report that none of the compositions possess sufficient merit to warrant an award, the association reserves the right to withhold the prize. The competition closes Nov. 1, 1917. Full particulars may be obtained from the superintendent of the Volta Bureau, 1601 Thirty-fifth Street, Northwest, Washington, D. C.

THE annual meeting of the Marion County Society for the Prevention of Tuberculosis was held February 15 at Indianapolis. The report showed that the society's work has been more effective this year than ever before, and the organization is now in a position to take up new phases of the fight against tuberculosis in Marion County. Part of the report was devoted to the discussion of the fresh air school, showing a total of fifty-eight children enrolled at the fresh air school on the Technical Institute grounds, and the average gain in weight for each child was 8.12 pounds. One pupil gained 27.5 pounds. Only one out of the fifty-eight failed to gain in weight and to respond to the open air treatment. The cost of maintaining the school for 1916 was \$1,929.42.

IN appreciative commemoration of the twenty-five years' secretaryship and faithful service of Dr. Charles McIntire, the American Academy of Medicine have raised a fund, the income of which is to be expended in accordance with the suggestions of Dr. McIntire. Therefore, the academy now announces two prize offers, the prizes to be awarded at the annual meetings for 1918 and 1921, respectively. The subject for 1918 is "The Principles Governing the Physician's Compensation in the Various

Forms of Social Insurance"; and the subject for 1921 is "What Effect Has Child Labor on the Growth of the Body?" Information regarding conditions of the contest, etc., may be obtained from the secretary of the academy, Dr. Thomas Wray Grayson, 1101 Westinghouse Building, Pittsburgh, Pa.

THE Council of National Defense, which met recently at Washington, has appointed a number of committees to develop the program for the mobilization of the resources of the country in time of war. At the head of each of these committees is a member of the Advisory Commission of the Council. To Committee A has been entrusted medical matters, including general sanitation, and Dr. Franklin H. Martin has been appointed chairman. The chairmen are instructed to select such committeemen as they may choose and to call any necessary conferences. The Committee on Standardization of Medical and Surgical Supplies and Equipment of the Council of National Defense expects soon to call into conference the manufacturers of drugs, instruments, hospital supplies, etc., for the purpose of completing a standard list of articles essential to the successful medical activities of the army, the navy, the public health service, and the Red Cross. This committee is composed of Dr. Frank F. Simpson, chief of the medical section of the Council of National Defense, chairman; Surgeon T. W. Richards, United States Navy, secretary; Dr. Richard H. Harts of Philadelphia; Lieut.-Col. Carl R. Darnall, United States Army; Dr. Joseph A. Murphy, United States Navy, and Asst. Surg.-Gen. W. C. Rucker of the Public Health Service.

CORRESPONDENCE

THE JOURNAL COMPLIMENTED

CHICAGO, Feb. 26, 1917.

Dear Dr. Bulson:—I note that Mr. Schortemeier—your Executive Secretary—is going to start a publicity campaign to increase the membership of the State Association. With the support you are giving him in your journal, he should have an easy time of this.

Taking, for instance, your February issue: I cannot conceive how any Indiana physician, who is eligible for membership, could help but join the state society, if for no other reason than to receive THE JOURNAL of the Indiana State Medical Association.

Sincerely yours, WILL C. BRAUN.

DR. J. R. EASTMAN DETAINED IN COPENHAGEN

ROSEBANK, STATEN ISLAND, N. Y.,
Feb. 22, 1917.

Dear Dr. Bulson:—The latest message which I received from my husband reads as follows: From Copenhagen: "Safe; don't worry. Home first chance," etc. Of course, that means the steamer *United States* on which he intended returning to this country, never left Copenhagen February 8, as scheduled.

Naturally I am real worried about present conditions at sea which make it impossible to travel in safety.

I know Dr. Eastman will promptly report to you when he is with us again, and I daily pray it will be real soon. Joseph and I are with my parents again. Of course, we will return to dear old Indiana when my good husband arrives.

With our united warm regards, cordially,
(Mrs. J. R.) VIOLET G. EASTMAN.

AN EXPLANATION

RENO, NEV., Feb. 21, 1917.

To the Editor:—Replying to yours of the 15th, relative to my association with the United States Medical Society, mention of which you made in a recent issue of your JOURNAL, allow me to inform you that it was through misrepresentations on the part of the officers of that organization that I allowed my name to be used in connection therewith. As soon as the editorial in the *Missouri State Journal* came to my attention I immediately withdrew from the U. S. Society, both as a member and officer. As I wrote the editor of the *Missouri Journal*, publication of which was given in the November issue thereof, I am not in sympathy with "fee splitting," and had I known that the U. S. Society was to be made up of that class of men, you may be sure that I would have paid no attention to their communications. They said absolutely nothing about this feature when asking me to become a member and one of their officers, but approached me in a different and, I must say, in a very dignified manner. But, on finding the whole truth of the matter, I got out, and at once.

I have reasons to believe that your republication of the editorial from the *Missouri Journal* has done me more or less injury among my Indiana friends, and I would ask that you give space in your journal for the publication of this note. Yours very truly,

GEORGE L. SERVOS, M.D.

SOCIETY PROCEEDINGS

MINUTES OF THE ANNUAL MEETING OF THE INDIANAPOLIS MEDICAL SOCIETY

Jan. 2, 1917

The meeting was called to order by President Dr. A. B. Graham. Minutes of previous meeting were read, corrected and approved. Drs. Charles F. Bayer and Roy B. Storms were elected to membership in the society. The annual report of the treasurer was read, approved and accepted. Dr. Thomas B. Eastman, as chairman of the legislative committee, reported that the committee concurred entirely in the resolution of the Vanderburg County Medical Society favoring an amendment to the present Workmen's Compensation Law, to the effect that the employee be allowed the privilege of choosing his own surgeon or physician instead of being compelled to take the attendant designated by the employer. Dr. Eastman moved that the report of the committee be accepted. Seconded and passed. In his president's address Dr. Graham dwelt on the various criticisms which had been heard during the year on the officers and management of the society. In addition he urged the very serious consideration for planning for a permanent home.

The election of officers for the year 1917 resulted as follows: President, Dr. T. B. Noble; first vice president, Dr. Murray N. Hadley; second vice president, Dr. E. A. Brown; secretary-treasurer, Dr. Leslie H. Maxwell. Drs. T. J. Dugan and H. S. Thurston were elected members of the judicial council to succeed Drs. N. E. Jobs and Will Shimer. Drs. C. F. Neu, W. P. Garshwiler and C. D. Humes were elected as delegates to the meeting of the state medical association for a term of two years each and Dr. W. S. Tomlin was elected for one year. Drs. C. H. McCaskey, H. K. Langdon, E. E. Padgett, A. W. Brayton, W. N. Wishard and F. B. Wynn were elected as alternate delegates.

Meeting adjourned. Attendance 112.

Jan. 9, 1917

Meeting was called to order by President Dr. T. B. Noble. Minutes of previous meeting were read and approved. The applications of Drs. C. J. McIntyre, George Wood, B. J. Terrell and H. L. Weer were read for the second time and referred to the judicial council. The following resolution was offered by Dr. T. C. Kennedy:

WHEREAS, At the last meeting of the Indianapolis Medical Society, the retiring president, A. B. Graham, in his splendid address made some suggestions looking to the advancement and betterment of this society.

WHEREAS, It is believed by many members of the society that if some of these suggestions (if not all) were put into effect, the society as a whole would be greatly benefited, therefore be it

Resolved, That a committee of five be appointed by the president to consider the suggestions made by Dr. A. B. Graham, and be it further

Resolved, That said committee report back to the society with recommendations as to the adoption or rejection of said suggestions, on Tuesday evening, Jan. 23, 1917.

Dr. T. C. Kennedy moved the adoption of the resolution as read. Seconded by Dr. Kitchen. Passed by the society.

PROGRAM

Paper: Roentgen-Ray Diagnosis, Dr. R. C. Beeler.

Paper: The Desirability of Employing All Possible Methods in the Definite Diagnosis of Pulmonary Tuberculosis (Lantern Slides), Dr. F. B. Wynn.

Paper: Urinary Infection in Children, Dr. L. H. Segar.

DR. E. F. KISER: Early diagnosis is essential in pulmonary tuberculosis. When the Roentgen-ray shows changes a cure is questionable. Arrest is a better word to use than cure. We are growing somewhat lax in our physical examinations, relying more upon laboratory diagnosis. Family and personal history very important. We may say that a family tendency to this disease is inherited. Most persons contract tuberculosis in infancy through the tracheo-bronchial glands. A proper and intelligent correlation of findings is necessary. The expense of some of the recent aids in diagnosis makes them prohibitive to the poorer class.

DR. L. H. DUNNING: Dr. Wynn deserves great credit for the presentation which he has given us. It is an exceedingly thorough study of the subject and will serve to make us more painstaking in our examinations. In most cases of pyelocystitis in children the cystitis overshadows the pyelitis and we consequently frequently overlook the pyelitis. Rest in bed, large amounts of water, hexamethylenamin and free catharsis generally clear the case.

DR. E. B. MUMFORD: Dr. Wynn recalls to our minds many things which we have forgotten. We have been depending on others to give us our diagnosis. Cases of pyelitis no doubt have been frequently overlooked. A routine urinalysis in suspicious cases would be a great aid.

DR. A. C. KIMBERLIN: We have had our attention called to the frequency of right apical lesions and the difficulty of finding the same in many cases. The history is often difficult to obtain because persons do not care to admit the presence of tuberculosis in the family. Repeated attempts are often necessary. Great harm is done by the State Laboratory in the examination of sputa. The doctor out in the state rests secure in the laboratory report received. These reports are correct, but we cannot depend on the negative findings in cases. Physical findings are often the only clew.

DR. A. M. COLE: We will not know the exact value of the Roentgen ray in diagnosis for ten years to come. It has great value in incipient cases. Some cases show physical signs before the Roentgen ray gives any hint of trouble and vice versa. As soft tissue technic improves we will be able to make instantaneous exposures and show the incipient cases with certainty. Another value of the Roentgen ray is its prognostic value. It shows the exact anatomical involvement.

DR. A. E. STERNE: The term "cold" is so frequently included among the symptoms. So-called persistent cold is always open to suspicion as an incipient tuberculosis.

DR. J. M. CUNNINGHAM: In all of the charts we have seen this evening we note that the pulse rate is out of proportion to the temperature. Rapid pulse and gastro-intestinal disturbances precede tuberculosis. Children have a cystitis persisting long after the acute attack subsides. The matter of care in preventing a fecal infection of the vagina is important during the convalescence.

Meeting adjourned. Attendance 97.

L. H. MAXWELL, Secretary.

Jan. 23, 1917

Meeting was called to order by Dr. T. B. Noble, the president. Reading of the previous minutes was dispensed with. The report by Dr. Kiser of the committee to consider recommendations of retiring president are as follows:

Your committee appointed to consider the recommendations made by the retiring president, Dr. A. B. Graham, in his annual address, begs to report as follows:

First: Inasmuch as accusations have in the past been made that certain members of the society have been denied the privilege of appearing on the program of the society, and whereas such accusations are utterly without foundation in fact, and in order to forever dispel any such impression which may have been erroneously created in the mind of any member of the society, your committee recommends that the by-laws of the Indianapolis Medical Society be so amended as to require that every member of the society appear on the program at least once in every three years, with either the presentation of a paper or a case report or as a discussant, and that the name of any member who shall refuse to appear in such capacity at least once in three years, shall be read before the society.

Second: Your committee recommends that at least three times in each year a non-resident physician be invited to address the society and that when practicable an informal reception and luncheon be arranged for such evening.

Third: Your committee further recommends that the third Tuesday night in each December be designated as "Memorial Night," and that on such evening special services be held in memory of those members of the society who have departed this life during the preceding year.

Fourth: The retiring president has called attention to the fact that smoking is objectionable to some of the members of the society and it is recommended that action in the matter of smoking during sessions of the society be left to a direct vote of the members.

Fifth: In conclusion, your committee recommends that the president of the society be instructed to appoint a committee of seven members, of which committee Dr. A. B. Graham shall be the chairman and the president of the society a member, ex-officio, to consider immediately the matter of securing a permanent place of meeting for the society.

Respectfully submitted.

T. C. KENNEDY, Chairman.

F. B. WYNN,

W. P. GARSHWILER,

T. B. EASTMAN,

E. F. KISER, Secretary,

Committee.

The report was handed to the secretary as a resolution. Dr. Kiser moved that they be accepted and acted on separately. The first recommendation was read and moved that it be submitted as an amendment. The second recommendation was accepted. The third recommendation was accepted. The fourth recommendation be tabled. The fifth recommendation was accepted.

PROGRAM

Paper: A Brief Survey of a Study of 2,606 Cases of Mental Disease, Dr. Max A. Bahr.

Abstract.—The cases reported in this study were all newly admitted patients to the Central Indiana Hospital for the Insane during the years of 1908 to 1916. The frequency with which the various types of psychoses occurred were as follows:

Psychoses	Men	Women	Total
Infective exhaustion	3.2	5.5	4.2
Intoxication	9.2	2.1	6
Dementia praecox and allied..	17.5	13.1	15.5
Psychoneuroses	1.1	5.1	2.8
Manic-depressive and allied...	16.5	30.2	22.5
Paranoia	6.5	10.6	8.3
Involution	7.6	8.5	8
Psychopathic constitution	1.9	3.2	2.4
Organic	11.9	9.1	10.6
Paresis	17.5	3.2	12.01
Unclassified	7.1	9.4	8

The infection psychoses were those which made their appearance in the course of some infectious disease and were brought about by the combined action of several factors as elevation of temperature, congestion of the nervous centers and poisoning of the centers by microbic toxins. The psychoses of exhaustion were chiefly the expression of a general prostration and exhaustion. Aside from the alcoholic and drug cases in the intoxication group were noted two cases of pellagrous psychoses. The 6 per cent. represented by this group include only the exogenous cases and does not represent by any means a detrimental influence brought about by alcohol as for example, by inheritance from alcoholic parentage. In the dementia praecox group all the psychic functions were not equally affected and in the consideration of all the types of this group, orientation and memory were often but little affected, while attention stream of consciousness, the emotions and the reactions were always decidedly impaired. Under the psychoneuroses were classified principally cases of hysteria, with a few traumatic and dread neuroses. Hysteria was clearly demonstrated to be a mental disease and the result of mental conflict. The manic-depressive psychoses which represented the greatest number of admissions manifested itself in attacks presenting a double characteristic; a tendency toward recovery without intellectual enfeeblement and a tendency toward recurrence in 51.5 per cent. of the cases. The various types of this disease were described somewhat in detail. The cases of paranoia were those which constituted the so-called "reasoning insane," in that their logic was only apparent; their reasoning was always tainted with some original vice which lead them to the systematized rejection of arguments opposing their ideas. In the involution psychoses the history of heredity was noted in over 50 per cent. of the cases and the most frequent causative factors were grief and stress and in the earlier cases associ-

ated with the menopause in women. The psychopathic constitutional state were those cases which did not present a well-defined psychosis, but who generally from childhood manifested evident psychic anomalies which justified their being classified under this group. The organic psychoses were those which represented organic cerebral affections whether they were diffused or localized and which manifested an influence on the psychic function. The various types of this group were mentioned and described somewhat at length. In paresis whenever we were able to get a history of syphilis it antedated the outbreak of the psychosis from fifteen months to twenty-two years. The disease existed nearly six times as frequent in men as in women, its most frequent occurrence was between the ages of 30 and 45, during which period nearly one half of the cases occurred. The most constant symptoms of this group were dementia, disturbance of speech and pupillary disturbances. The unclassified group represented those cases in which there was a combination of psychic manifestations present which would not admit of any of the above classifications. In many of these cases there was a suggestion that more than one type of psychosis was at play, which is not improbable in psychiatry. In other cases the diagnosis was deferred to permit of more time for observation and final classification. A few of this group was found not to be insane and were discharged as such.

Paper: Reporting a Case of Twins Pregnancy in Uterus Duplex Bicornis, Dr. J. W. Ricketts.

Abstract.—Patient, aged 19, a well developed white woman who became pregnant four months after marriage. Her menstrual history is negative. Her menstrual history has always been normal until June 19, 1916. From this date until September 1st nothing of any importance occurred except that the right breast enlarged, the area about the nipple became deeply pigmented, and the veins became prominent while the left breast remained normal. At this date or four months after impregnation probably took place, she began to flow very profusely without any apparent cause. This occurred periodically. On October 7th the flow for the first time was associated with pain, gradually increasing in frequency and severity. Examination of the abdomen revealed a large symmetrical tumor extending from the midline obliquely upward and outward into the iliac fossa with the upper border reaching McBurney's point. Another tumor mass, a much smaller one, could be felt to the left of the midline. By pressing down with the left hand on the tumor in the right iliac fossa and the right hand in the vagina a fetus could be made out, but I could not explain all that I felt in the pelvis. I thought at first I was dealing with an interstitial pregnancy and mistook the mass to the left for the uterus. Dr. Ferguson was called in consultation. He was also unable to make a diagnosis though he suggested that we might be dealing with a twin pregnancy. In spite of every effort, a few hours later the patient aborted twins equal in size and apparently of five months gestation. The first placenta was delivered normally after birth of the twins. The second placenta, however, was retained and we were unable to deliver it by the usual methods. The patient was removed to the hospital where the uterus was emptied. A more complete examination showed that abortion was due to hemorrhage from a low implantation of

the first placenta, in the common cervix, while the second placenta was high up in the fundus of the right cornu. Examination also revealed two separate distinct horns. The fact that a twin pregnancy in a bicornate uterus duplex is so rare, and the difficulty in diagnosis due to the left horn being much smaller posterior and easily mistaken for a tumor or rudimentary horn are the features which make this case so interesting.

Paper: Some Recent Eye Injuries, Dr. F. C. Heath.

Abstract.—Dr. F. C. Heath reported five recent cases of penetrating wounds of the eye, six of non-penetrating wounds and two of return of inflammation in old injuries. Interesting features were the peculiarity of some of the wounds, a radiating puncture, a double puncture and extensive scraping of intervening tissue, parallel cuts, small corneal wounds with unusual amount of opacity, a nonpenetrating cut which probably changed the angle of astigmatism from perpendicular to horizontal, an abrasion of cornea with apparent rupture of iris which was really an irregular pupil, a lens dislocated by a blow of the fist. The important lessons were the necessity of carefully differentiating between superficial and deep inflammations before sacrificing eyeballs needlessly, the recognition of softening and increased tenderness of injured eye and watering of good eye as signs of danger requiring prompt enucleation, and especially the fact that hard nuclei of wounded and dislocated lenses in middle-aged or elderly people were nonabsorbable and therefore dangerous, while the lenses of young adults were completely absorbed, and, as shown by one case aged 41, this might take place in patients much older than was formerly supposed.

Paper: Three Cases of Concussion, With and Without Fracture Received from Injuries as Follows: Dr. C. D. Humes.

Abstract.—The first by falling a few feet, landing on the back; the second by direct injury by trolley; the third by being flung headlong by a Ford. In only the second case was the scalp lacerated or did there appear any marked evidence of cranial injury. Case 1.—J. W., aged 58, brewer, was injured January 2 when he fell from a scaffold, striking the occiput, shoulders and elbows; was taken home in buggy; walked into house and then began vomiting blood. This condition lasted twelve hours; his right ear was bleeding freely and this continued forty-eight hours. He was conscious and able to care for himself until at the end of twenty-four hours; when he became somnolent and in forty-eight hours was semi-maniacal. He was quieted with hypodermics. On the seventh day after the accident was semidelirious, restless and responded very slowly. He was able to describe and define his frontal and occipital headache. The pulse was 50 and irregular; systolic pressure 200; diastolic pressure 95; pupils were equal and normal. His pulse rate and high blood pressure indicated unquestionable cerebral concussion and operative procedure was prepared for. Feeling that a few hours wait might relieve the situation and certainly add nothing to it, this was agreed on. Large mercurials and salines were given and within ten hours, the pulse had increased to 70, he was less somnolent and in twenty-four hours the blood pressure had reduced to 115-70 and pulse at 85. He was quiet and apparently normal excepting palsy of the left external rectus which

Dr. Mumford, the attending physician, reports being still present. I report this case to emphasize the virtue in waiting in some cases of cerebral compression following fracture as nature sometimes can take better care of it at less expense to the patient than the operator.

Case 2.—E. S., aged 61; struck by street car while crossing the tracks in his automobile. A bow of the top was struck, bent inward, inflicting a scalp wound over the left temple and rendering the patient unconscious. He was carried to the curb, made comfortable and left in this position until consciousness returned. In about forty-five minutes he regained consciousness and was able to understand that I was sending him to the City Hospital. He was transferred very carefully under the influence of opiates and confined to bed for forty-eight hours. His pulse which was at first very slow, soon became normal and at the end of twenty-four hours, his pulse and blood pressure were both normal. Against my advice, however, he was transferred home at the end of forty-eight hours. He developed a double vision the second day which continues to the present. I report this case to emphasize the value of complete rest at the time of accident. Everything being equal, if the patient is protected from extreme weather, it is far better to keep them reclining and perfectly quiet than to transfer them several miles in an ambulance over questionable streets at a questionable speed. I would digress a moment to suggest that such treatment be instituted for concussion or fractured cases, and further that no better treatment can be given these patients for the first few hours than to leave them absolutely alone except to contribute to whatever is apparent for their comfort.

Case 3 I report to show the debate that often arises in one's mind when confronting the problem of operation. The fact that this boy dies, rather militates against my argument. Paul B., aged 18, dental student, was assaulted by a Ford in North Illinois Street, October 31. Was first thrown across the radiator and then whipped full length in the street. He was taken to the City Hospital at once; was conscious during the transfer and thought he was not seriously injured. His right ear began bleeding enroute to the hospital and soon after his admission became confused, dazed and somnolent. I saw him some three hours after the injury. The pupils were slightly dilated and reacted promptly to light. The right ear was discharging blood and spinal fluid; the belly was scaphoid. All deep reflexes increased and equal; ankle clonus bilateral and equal; heart clear and regular; slow pulse 55, systole 138 and diastole 80. By later report, I learned that this pressure was normal for him. Projectile vomiting followed but gradually quieted. At this time developed a general convulsion. I hurried to the hospital but found such evident pronounced general involvement that I decided to wait for a few hours. He soon quieted; his pulse 78, respiration 22; systole 135; diastole 80 and he continued resting quietly until about the eleventh hour, when he developed stertorous breathing. Rachientesis revealed almost pure blood; pulse 120; systole approximately 200. He died within an hour. From the intensity of the hemorrhage in the ear and the general nervous display and the fact that he did not show any actual recovery from the first attack, made me

feel that surgical interference would only have added to the gravity of the situation. I believe in a great majority of cases that if the patients cannot recover from the natural shock, with or without fracture, that they stand a much less chance to go through a decompression, particularly as we never know to what extent nature will take care of it. If extensive, we can only do a little and leave the major portion unfinished. To briefly summarize, when we feel that the very limit of cerebral compression has been reached, as evidenced by slow pulse tension and the high blood pressure, it is allowable and most times advisable to wait before doing either spinal puncture or decompression; absolute rest at the time of accident is essential and continued rest until all phases of the cerebral congestion has disappeared should be forced. The free use of morphin and ice packs are always indicated but one should avoid being confused by the pulse induced by the drug. Absolute quiet and rest, however, obtained with the least irritation to the patient, is necessary and oftentimes quite sufficient within themselves.

Meeting adjourned. Attendance 65.

E. B. MUMFORD, Acting Secretary.

Indianapolis City Hospital

Jan. 30, 1917

Meeting called to order by President Dr. T. B. Noble. Minutes of previous meeting were read and approved. The accounts review committee consisting of Drs. W. B. Kitchen, T. B. Noble and L. H. Maxwell, reported on an account of Dr. R. G. Hendricks for services rendered Stewart Mathis, an employee of the Hotel Edward. This account was considered a just one and the committee recommended to the society that the account be paid. The report of the committee was adopted by a unanimous vote of the society.

The secretary read a communication from Dr. A. E. Sterne, chairman of the administrative committee of the state medical association asking that the members of the society submit to a voluntary assessment of \$1 for each member for the year 1917 in order that the committee have a sufficient fund to meet the necessary expenses. A motion to this effect was lost by a rising vote. Dr. Wynn moved that (1) the amount of 50 cents per capita be voted from the treasury to bear the expense of the administrative committee and (2) that the other county societies bear their proportionate part. Seconded by Dr. Erdman and carried. Dr. Noble announced the following committee for the securing of a permanent home for the society: Drs. A. B. Graham, F. B. Wynn, O. G. Pfaff, T. C. Kennedy, E. F. Kiser, A. C. Kimberlin, W. P. Garshwiler and T. B. Eastman.

PROGRAM

Dr. Bernhard Erdman presented (1) a case of multilocular infected hydrocele which had been opened, drained and was progressing satisfactorily. (2) A case of urinary extravasation into scrotum and surrounding tissues. The scrotum contained 22 ounces of urine and pus. There was rupture of the urethra at the penoscrotal angle. (3) A case of suprapubic cystotomy under local anesthesia.

Dr. S. E. Earp presented (1) a case with a tuberculous mass to the left of the mediastinum and ex-

tending from the second to the seventh ribs. Externally there was a protrusion as is sometimes found in aneurysm, but Roentgen-ray examination showed a different density from heart tissue and an irregular outline. (2) A case of syphilitic arthritis which had been treated as acute articular rheumatism. Wassermann was negative two or three times but after large provocative doses of the iodids the Wassermann was positive. The condition has improved very markedly under iodid treatment. Dr. E. B. Mumford presented (1) a case of fracture of the thigh, (2) a case of fracture of the humerus and (3) a case of dislocation of the proximal end of the clavicle. He also showed the Hawley fracture table, explaining the manipulations and its many uses.

Dr. N. E. Jobs presented a case of paralysis of the entire brachial plexus following a subcoracoid dislocation of the shoulder. Dr. C. F. Neu presented a case of peripheral neuritis with the typical wrist and foot drop.

Meeting adjourned. Attendance 96.

MUNCIE ACADEMY OF MEDICINE

Meeting of Dec. 22, 1916

Regular meeting of Muncie Academy of Medicine was held at Y. M. C. A. Building, Friday evening, Dec. 22, 1916, and was called to order by President U. G. Poland.

There was a quiz conducted by Dr. O. A. Spurgeon on the Physiology of the Stomach.

Dr. Sellars read a paper on the Clinical Diagnosis of Gastric and Duodenal Ulcer, in which he states that a patient coming to you with abdominal distress giving a history of sour stomach, belching, regurgitation of food, which has lasted a long time, who does not give you a history of colic, fevers, chills, jaundice, loss of weight, frequent and painful micturition, without blood, with no heart disturbance, with no early gas symptoms, after the taking of food; who does not give a qualitative food dyspepsia, in which certain kinds of food, shortly after ingestion, occasion distress, colic, gas and eructations, whose distress is not worse in periods and does not produce symptoms of shock, that will give a more or less definite time-incidence to the ingestion of food; whose vomiting is not uncommon, and whose relief will be constant with each emptying of the stomach; who gives a seasonal variation of disturbances; whose physical examination reveals tenderness over epigastrium, one is justified in suspecting gastric or duodenal ulcer.

He states that cardinal symptom of ulcer of stomach and duodenum is epigastric distress, and will bear a very definite relationship to the meal.

He states the nearer the ulcer to the pylorus the earlier the onset of distress. Pain comes on in gastric ulcer soon after food is ingested and often while patient is eating.

Another symptom of great value is hemorrhage of stomach or bowels. It is important to verify your diagnosis with the finding of blood in stool or vomitus, which he thinks will be found in about 25 per cent. of all cases but thinks that if you will go into this matter in detail and follow them closely you will find that 100 per cent. will give a history of occult blood at some time.

Dr. Sellars gave three case reports.

Meeting of Dec. 29, 1916

Regular meeting of Muncie Academy of Medicine was held at Y. M. C. A. Building, Friday evening, Dec. 29, 1916, and was called to order at 8:20 by Dr. B. B. Morrow, vice president pro tem in absence of Dr. U. G. Poland.

Dr. Fair read two cases from Cabot and submits them for diagnosis. Dr. Sellars reread his paper on the Diagnosis of Gastric and Duodenal Ulcer.

Dr. Buckles read a paper on Symptoms of Carcinoma. Summarizing: He states that constant irritation, fixed mass, adjacent lymphatics, enlargements, pain, hemorrhage, however slight, advancing anemia, however slow, gradual loss of weight, may be said to be the general signals of carcinoma.

Papers discussed by Drs. C. M. Mix, W. W. Wadsworth and Payton.

Program for next meeting: Paper, Dr. C. M. Mix: Treatment of Carcinoma by Surgical Method.

Meeting of Jan. 19, 1917

Regular meeting of Muncie Academy of Medicine was held at Y. M. C. A. Building, Friday evening, Jan. 19, 1917, and was called to order at 8 p. m., by the president.

Minutes of previous meeting were read.

Mr. Harry Wolfe, representing the Aetna Life Insurance Company, explained the Group Medical Protective Insurance offered by the Aetna Company. Mr. P. K. Morrison, representing the Ft. Wayne Medical Protective Company, presented his company's policy.

Dr. Molloy read a paper on "Treatment of Carcinoma by Caustics." The paper was discussed by Dr. Mix. He reported good results with various pastes in superficial condition followed by the Roentgen ray.

Program for next meeting: Paper by Dr. B. R. Kirklin, "Treatment of Carcinoma by Roentgen Rays."

It was voted that the secretary wire our representative and senator in the state legislature as to our sentiments regarding the Chiropractic Bill.

Adjourned.

FORT WAYNE MEDICAL SOCIETY**Meeting of Jan. 16, 1917**

Was called to order at the Commercial Club at 8:50 by President Beall. Seventeen members present.

Dr. Fred Metts of Bluffton presented a case of two months' duration in a man 26 complaining of pain at right base of heart and tachycardia, without thyroid enlargement. Mildly positive Wassermann. Exhibition of mixed treatment caused sudden enlargement of the thyroid but improvement in general condition. Now shows convergence, fatigue, Von Graefe's sign and tachycardia and very obvious thyroid.

Case discussed by Dancer, Bruggeman, Porter, Jr., McOscar, Metz, Weaver.

Porter, Jr., presented a case of advanced diabetes without any symptoms or past history of syphilis. Quadruple plus Wassermann.

Paper on Roentgenotherapy was read by Dr. Fred Metts. Two common methods of use, (a) fractional; (b) single dose. Latter an improvement over old method as it allows of more accurate measurements of quantity and quality of ray; hence untoward effects are not so common. Hard tube better than soft tube.

Filtered ray less apt to burn. Has been suggested that nausea and malaise which sometimes follow use may be due to ozone from the high tension wire. Roentgen ray powerful therapeutic agent which may cause damage of a serious nature. Dr. Metts has used it in ten cases of squamous eczema with excellent results; three cases of psoriasis with good results; in two cases of "weeping eczema" has seen no result. Excellent results in two cases of lichen planus. Two cases of lupus, one good result and one indifferent. Excellent results in parasitic skin disease. Believes surgical treatment should be used first in epitheliomata followed by Roentgen ray. Has used deep therapy in five cases of inoperable carcinoma, four still alive. One case of fibroids with marked improvement. Two cases of uterine cancer by the Percy method.

Paper discussed by Drs. Grandy, Weaver, McOscar, Lohman Edlavitch, Bruggeman, and closed by Dr. Metts.

Adjournment.

Meeting of Jan. 23, 1917

Was held at Lutheran Hospital. Thirty-six members present. Minutes of preceding meeting read and approved.

Dr. B. Van Sweringen reported a case (a) eclampsia. Primipara on whom he performed cesarean section with good recovery of both mother and child. (b) Compound fracture of both bones of the leg with infection. Subsequent bone graft which later had to be removed. Patient was shown to have fairly satisfactory functional result. (c) Fracture (by fall) of both malleoli, tarsals crushed in both feet. Man shown six weeks afterward with some eversion of left foot and some impairment of circulation. (d) Case compound fracture of both bones of leg plated during infection with considerable discharge of the leg at present time (four weeks after operation). (e) Common fracture of both bones of the leg eleven weeks old with some abnormal mobility remaining. (f) Fracture os calcis. Roentgenograms were shown of all cases.

Discussed by Drs. Grandy, Weaver, Calvin, Gould, Duemling, McOscar and Sweringen.

Dr. Duemling showed (a) gangrenous gallbladder removed from a man 55 with normal temperature and pulse and pain of thirty-six hours' duration. Operation showed stone in cystic duct and gangrene of entire gallbladder. (b) Tumor of left kidney, first noticed four years ago, removed from a woman of 40 with a phthalein output of 28 per cent. on entrance in the hospital which subsequently rose to 54 per cent. Kidney which contained a very large cyst was removed by the abdominal route. (c) Case of primary carcinoma of the pancreas. Microscopical section shown.

Discussion by Drs. B. Sweringen, Rawles, Edlavitch, Porter, Jr., and Duemling.

Adjournment.

Meeting of Jan. 30, 1917

Called to order by President Beall. Eight members present. In absence of secretary Dr. Eberly acted as secretary pro tem. The reading of the minutes of last meeting was postponed. There being no clinical cases Dr. J. W. Squires read a paper entitled Hounding the Deer.

Meeting adjourned.

DELAWARE COUNTY

Meeting of March 2

Regular meeting of Delaware County Medical Society was held in Muncie Y. M. C. A. Building, Friday evening, March 2, and was called to order at 8:15 by past president G. R. Andrews. The feature of the evening's entertainment was an address on Epilepsy by Dr. W. C. Van Nuys, superintendent of the Epileptic Village at New Castle, who said: Although epilepsy was one of the earliest diseases our knowledge of its etiology and treatment has advanced comparatively little. Hippocrates gives a good description of the epileptic fit. The more experience I have with the disease the less I certainly know, and I approach its discussion with fear and trembling. There are several types presenting the individual characteristics. (1) Functional (hysterical, epileptiform attacks, dementia praecox, etc.). (2) Gross brain lesions (general paralysis, syphilis, meningitis, tumors, sclerosis, etc.). (3) Microscopic brain lesions (transient or permanent tissue changes, convulsions, nephritis, toxemias, chemical or metabolic, etc.). (4) Internal secretions (thymus, thyroid, ovarian, etc.). (5) Infectious diseases (measles, scarlet fever, diphtheria, etc.).

Epilepsy is a name applied to various classes of convulsive disorders. I consider epilepsy a disease of the brain. Nearly all types are included under the four heads: grand mal, petit mal, Jacksonian and psychic. Grand mal is introduced by an aura in 40 per cent. of all cases. The aura of petit mal may constitute the principal part of the seizure. Petit mal varies more than grand mal. The Jacksonian type should not be considered real epilepsy, as it is really evidence of focal disease of the brain. The psychic type is interesting from a medicolegal point of view as it varies from a slight irritation or restlessness to long periods of excitement, and includes examples of dual personality.

Causes: Epilepsy is a disease of childhood. In 80 per cent. of all cases the disease occurs before 21, and occurring after 25 only rarely, and then due nearly always to alcohol or syphilis. When occurring in those past middle life it is usually an accompaniment of sclerosis.

Heredity is a great predisposing factor, i. e., the neuropathic tendency. Birth accidents come next in importance. Reflex irritations, refractive errors, adenoids, nasal obstruction, scar tissue, ovarian disease and digestive disturbances. Surgical operations, anesthesia or serious disease in an epileptic may greatly lessen the frequency of the attacks for weeks or months. Fright and shock are not real causes, simply aggravate or precipitate a crisis in one with an epileptic diathesis. In 60 per cent. of necropsies gross lesion of the brain are found. Epilepsy is a terminal disease so surely as paralysis follows anterior poliomyelitis.

Prevention depends on better parentage; better obstetrics; education; control of infectious and venereal diseases; banishment of alcoholic drinks; hygienic surroundings in childhood.

The child who reacts to any stress with a convulsion is a marked child, a potential epileptic, who should be reared carefully. There are about 5,000

epileptics in Indiana. Epilepsy is not a fit, it is a mental defect.

The address was discussed by Drs. Quick, Gronendyke, Smith, Wiggins, Wadsworth, Kemper and Sellars.

Adjourned.

H. D. FAIR, Secretary.

ELKHART COUNTY

Meeting of Dec. 7, 1916

The thirty-seventh annual meeting was called to order at 1:30 p. m., by President Eby in the Century Club, Elkhart.

PROGRAM

1. "The Interpretation of Blood Pressure Ratios in Cardiovascular Diseases," Dr. Willard J. Stone, Toledo. Discussion: Dr. A. C. Yoder, Goshen; Dr. C. S. Rosenbury, South Bend.

2. "Causes of Recurrence after Operations on the Bile Passages," Dr. Daniel N. Eisendrath, Chicago. Discussion: Dr. H. H. Martin, LaPorte, Dr. A. C. McDonald, Warsaw.

3. "Transplantation of Flaps of Fat and Tissue in the Cure of Deformities, Contractures, Hernias, etc.," Dr. Allen B. Kanavel, Chicago. Discussion: Dr. C. C. Terry, South Bend; Dr. J. C. Fleming, Elkhart.

4. "Six Months' Experience in Charge of Base Hospital, Germany," Dr. H. M. Richter, Chicago.

5. Evening Address, "Borderland Sanity—The Value of Eccentricity," Dr. Archibald Church, Chicago.

Dinner was served to all visiting physicians in the Century Club Grill Room at 6 p. m.

Adjourned.

Meeting of Jan. 4, 1917

Call to order at 8 p. m., by President Eby. Minutes of November and December meetings read and approved.

Paper, "Medical Legislation. Its Need. How to Procure," Dr. E. Holdeman, Elkhart.

Annual election of officers resulted as follows: President, Dr. H. J. Defrees, Nappanee; vice president, Dr. E. M. Hoover, Elkhart; secretary, Dr. J. A. Work, Jr., Elkhart; treasurer, Dr. P. B. Work, Elkhart; censor, Dr. H. W. Eby, Goshen; delegate to state meeting, Dr. G. W. Spohn, Elkhart.

Report of committee on Thirteenth District meeting at Elkhart, Nov. 14, 1916, showed that Elkhart Academy of Medicine paid all bills incidental to District meeting.

Report of committee on annual meeting, Elkhart, Dec. 7, 1916. Bills totaling \$154.18 allowed by vote of society.

Communications from executive secretary, F. E. Schortemeier, Swan-Myers Company and State Anti-Tuberculosis Society read by secretary and discussed.

Motion made and carried that resolutions be sent to legislative committee of Indiana State Medical Association to the effect that this society favors maintenance of present high standards in medical legislation.

Motion made and carried that chair appoint committee of five to investigate legislative matters in Indiana State Assembly, to familiarize itself with facts concerning impending legislation and to send telegrams and letters to legislators at proper times, stating our views and conclusions concerning such legislation. Committee: J. C. Fleming, Elkhart, chair-

man; C. W. Frink, Elkhart; I. J. Becknell, Goshen; A. C. Yoder, Goshen; H. J. Defrees, Nappanee. Secretary was made a member of committee ex-officio.

Eighteen members present.

HUNTINGTON COUNTY

Huntington County Medical Society met in Commercial Club rooms, Feb. 7, 1917, at 8 p. m. Roll call showed sixteen members present.

An interesting meeting was held as to the general points of business of the society after which Dr. C. S. Black of Warren read paper on blood pressure. The essayist briefly reviewed the history of the study of blood pressure and dwelt on the importance of it being a routine procedure. After defining blood pressure as arterial tension he defined the three classes: (1) normal, (2) hyper-above, (3) hypo-below.

Three readings should be taken. First, systolic, greatest pressure; second, diastolic, lowest pressure and occurs at the beginning of the systole, and third, the pulse range which is the difference between the systolic and the diastolic. The essayist described the method of taking blood pressure and the various instruments used and made the important point that the band about the arm should be on the level with the heart. If the band be above, the reading will be too low, and if below the level of the heart the reading will be too high. He emphasized the importance of the stethoscope on the radial pulse as an adjuvant in taking readings. After discussing the theory of blood pressure and stating the normal blood pressures at the different ages and in the different sexes, he took up the causes of hypertension. Among the causes mentioned was excessive diet and fast eating, excessive exercise, pain, anger, emotion, mental effort, strain of business, high altitudes, loss of sleep and rest, poor hygiene, excessive smoking, alcohol, tea and coffee. Among the drugs mentioned were digitalis, adrenalin, strychnin and ergot.

High blood pressure may be found in the following diseases: Angina pectoris, arteriosclerosis, eclampsia, nephritis, epilepsy, diabetes, exophthalmic goiter, gout, aortic regurgitation, chronic cardiac hypertrophy, myocarditis, and various diseases of the eye.

He dwelt particularly on the importance of routine examinations for the detection and prevention of vascular complications. He discussed the importance of diet and careful examination of the urine, and figuring out other existing causes that may produce hypertension. The conditions must be met as the case demands. The first paramount thing in treatment is the free elimination which he usually does with calomel and Epsom salts. He emphasized that free elimination by Epsom salts is the most important part of the treatment, giving it every morning for two weeks, then about every third day for two weeks more. He mentioned sodium nitrite in 2 grain doses and also potassium iodid in 5 grain doses three times daily. Aconite 2 drop doses has a very favorable effect on high blood pressure. Other things to be recommended in treatment of high blood pressure are absolute rest, massage, milk diet in nephritic cases and exclusive cereal diet. Electric treatment is sometimes used to benefit. In cases of vasomotor spasms elimination by bleeding is also recommended. High blood pressure cases with sclerotic changes should be supplied with $\frac{1}{100}$ grain tablet nitroglycerin and a tablet should be placed under the tongue if pain

appears in the chest. In this way we are able to prolong the lives of our anginal patients.

He then took the subject of hypotension or low tension which are found in the acute cardiac conditions of diarrhea, dysentery, profuse vomiting and intestinal obstruction, the last four mentioned being due to the lack of fluids in the system. The moderate use of tobacco causes a slight rise in pressure, but toxemia from tobacco reduces pressure. Typhoid gives a very low pressure but prior to the perforation a rise in blood pressure occurs. Scarlet fever has a low pressure only when complicated with nephritis. Nervous exhaustion causes very low pressure, alcoholic delirium causes low blood pressure. In tuberculosis we have a very low pressure and here again is another reason we should make a routine of taking blood pressure in order that we may detect the early forms of tuberculosis and in treating a case of tuberculosis you get a rise in pressure as the case improves. In general treatment you want good hygiene surroundings and tonic, massage, moderate exercise. Search out the cause carefully and remove it and treat the case symptomatically. Some of the most used drugs are strychnin, nux and digitalis. The point was emphasized in giving anesthetics. Ether first increases pressure caused from reflex irritation of the mucous membranes and second, pressure still rises, due to muscular activity. In chloroform blood pressure decreases from the start and remains low except in pregnancy. Nitrous oxid also gives a rise in blood pressure due partially to asphyxia.

Dr. Northrup opened the discussion of the paper and was followed by many other members of the society.

Adjourned.

F. B. MORGAN, Secretary.

MADISON COUNTY

Madison County Medical Society met in Public Library, Anderson, February 27, with twelve members present.

An assessment to the state society for \$1 to each member was passed.

Dr. E. O. Daniels of Marion was essayist of the evening, presenting a paper on "Dyspepsia." He said there were really only two diseases of the stomach—cancer and ulcer. Showed the differential diagnosis of various diseases which might be confused with stomach. More discussion on thyroid cases than anything else. A plea was made to examine every case thoroughly. Paper was discussed by every member present.

Committee appointed to interview the senators and representatives in regard to the Chiropractic Bill reported that they had talked with all of them. Dr. Cook of Pendleton met with the committee at Indianapolis.

Dr. Gante was elected censor to fill the unexpired term of Dr. Henderson who left the county.

Adjourned.

SETH IRWIN, Secretary.

PULASKI COUNTY

Members of the Pulaski County Medical Society met in regular session at K. of P. Castle Hall, Medaryville, January 30, Dr. G. W. Thompson of Winamac presiding.

Supper was served by the Redinbo Hotel, the visit-



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Powder and Tablets, 1-10 grain.

ing physicians being the guests of the Medaryville members who are Drs. L. L. Stone, C. E. Linton, R. P. Hackley and J. J. Jones.

Dr. L. L. Stone read a paper on Endocarditis; Dr. Hackley on Pleurisy, and Dr. C. E. Linton on Lobar Pneumonia. All papers were freely discussed. Rev. Frank Hargrave gave a splendid address, which received a rising vote of thanks.

The meeting was well attended, splendid interest shown, and the good condition of the society is attested by the fact that but two physicians remain in the county who are not members.

Adjourned.

C. E. LINTON, Secretary.

TIPTON COUNTY

Tipton County Medical Society met in regular session at the office of Dr. Recobs at Tipton, January 11, with ten members present.

Following officers were elected for the coming year: President, Dr. R. M. Recobs; vice president, Dr. W. C. Furney; secretary-treasurer, Dr. A. E. Burkhardt.

With one or two exceptions, all the men of this county are members of the society.

The Fee Bill, which had been in force since 1906, was revised. A discussion of the matter of reporting infectious and contagious diseases and birth reports resulted in the general opinion that the state should pay a fee of 25 cents for each report. Representative Dr. H. G. Read was asked to give this matter his consideration.

Meeting adjourned to meet Feb. 8, 1917.

A. E. BURKHARDT, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

TABELLAE DULCES ARISTOCHIN (WESTERN), 1 Gr.—Each tablet contains aristochin 1 grain with cocoa, sugar and saccharine as vehicles.

TABELLAE DULCES HEROIN (WESTERN), $\frac{1}{100}$ Gr.—Each tablet contains heroin $\frac{1}{100}$ grain with cocoa, sugar and saccharine as vehicles.

TABELLAE DULCES NOVASPIRIN (WESTERN), $\frac{1}{4}$ Gr.—Each tablet contains novaspirin $\frac{1}{4}$ grain with sugar, starch, liquid petrolatum, saccharine, curcuma and oil of lemon as vehicles.

TABELLAE DULCES TANNALBIN (WESTERN), 1 Gr.—Each tablet contains tannalbin 1 grain with cocoa, sugar and saccharine as vehicles.

TABELLAE DULCES TERPIN HYDRATE WITH HEROIN (WESTERN), $\frac{1}{100}$ Gr.—Each tablet contains terpin hydrate $\frac{1}{2}$ grain, and heroin $\frac{1}{100}$ grain, with cocoa, sugar and saccharine as vehicles. Western Chemical Company, Hutchinson, Minn. Accepted for the Appendix to New and Nonofficial Remedies (*Jour. A. M. A.*, Feb. 10, 1917, p. 461).

PROPAGANDA FOR REFORM

GLYCEROPHOSPHATE COMP. AMPULS, 1 Cc., SQUIBB.—The Council on Pharmacy and Chemistry refused recognition to Glycerophosphate Comp. Ampuls, 1 Cc.,

Squibb, each said to contain sodium glycerophosphate 0.1 Gm., strychnin cacodylate 0.0005 Gm., and iron cacodylate 0.01 Gm., because the name did not indicate the potent ingredients and because the administration of a mixture of sodium glycerophosphate, strychnin, cacodylate and iron cacodylate is irrational. In recognition of the Council's conclusion, Squibb and Sons state that the sale of the ampules has been discontinued. This cooperation in the work of the Council on Pharmacy and Chemistry is gratifying (*Jour. A. M. A.*, Feb. 3, 1917, p. 388).

EMETINE IN DYSENTERY AND PYORRHEA.—Emetine is accepted today as an almost ideal specific against amebic dysentery. Experience indicates that by its use abscess of the liver can be prevented and even cured. When a differential diagnosis between amebic and bacillary dysentery cannot be made, emetine may be of diagnostic value because improvement follows from its use if the case is amebic. In neglected cases and some other forms of the disease the emetine treatment may fail of complete success. As a direct cure for pyorrhea emetine seems to have failed, not because it does not act on the ameba which are found in the pyorrhoeal pockets but because pyorrhea is not caused by ameba (*Jour. A. M. A.*, Feb. 3, 1917, p. 374).

THE PHENOLSULPHONEPHTHALEIN TEST.—It has been assumed that excretion of less than 60 to 80 per cent. of phenolsulphonephthalein in two hours is an indication of renal insufficiency. It has been found, however, that in certain experimental conditions, phenolsulphonephthalein may be destroyed in the body and therefore not appear in the urine although the kidneys function normally. If this condition is found to occur in clinical cases the interpretation of the tests may have to be limited to this: an excretion of 60 to 80 per cent., i. e., a positive result, within two hours after the injection of the phenolsulphonephthalein is evidence of satisfactory renal activity (*Jour. A. M. A.*, Feb. 3, 1917, p. 379).

THE WILLARD PYORRHEA TREATMENT.—After defrauding the public of amounts estimated by the federal investigators at \$75,000 a year by means of a fake cure for pyorrhea, F. W. Willard, M.D., D.D.S., has been denied the use of the United States mails. The business of the Willard concern, apparently owned by Oren Oneal, consisted of a mail-order plan of a so-called home treatment for pyorrhea or Riggs' disease (*Jour. A. M. A.*, Feb. 10, 1917, p. 477).

SARGOL.—The case of the United States against Wylie B. Jones and H. E. Woodward, proprietors of "Sargol" came to an end, Jan. 30, 1917, after a trial lasting thirteen weeks. Jones was fined \$20,000 and Woodward was fined \$10,000. Sargol was a nostrum of the get-fat-quick variety; as an alleged "flesh builder" it was advertised extensively and intensively by its exploiters (*Jour. A. M. A.*, Feb. 3, 1917, p. 381; Feb. 10, 1917, p. 468; Feb. 24, 1917, p. 642).

FATE OF TRYPSIN IN THE STOMACH.—Judging by recent experiments, it appears that the proteolytic enzyme of the pancreas isolated as trypsin is capable of withstanding a rather long digestion in presence of hydrochloric acid and pepsin provided that sufficient protein is present to combine with all or a part of the acid and so bring the free acid down to a certain level. From the observations it seems possible that some tryptic digestion may occur within the stomach when the free acid is low from combination with protein. The results do not, however, even remotely suggest that the administration of a few grains of the various commercial products claimed to contain trypsin or pancreatin would have the slightest therapeutic significance (*Jour. A. M. A.*, Feb. 17, 1917, p. 554).

FIRWEIN.—The Council on Pharmacy and Chemistry reports that Firwein (The Tilden Co.) is sold under the claim that when swallowed it has a "predilection" both for the bronchial mucosa and also for the genito-urinary organs. The Council finds that little

information is given in regard to the composition of Firwein. As the composition of Firwein is secret, the therapeutic claims unwarranted and its use irrational, the Council declared it inadmissible to New and Nonofficial Remedies (*Jour. A. M. A.*, Feb. 17, 1917, p. 564).

FIROLYPTOL PLAIN AND FIROLYPTOL WITH KREOSOTE.—The Council on Pharmacy and Chemistry reports that Firolyptol (The Tilden Company) is said to be composed of eucalyptol 10 drops, cottonseed oil $\frac{1}{2}$ ounce and Firwein enough to make 1 ounce, and that, as the composition of Firwein is secret, the composition of Firolyptol is also unknown except to the manufacturers. Firolyptol with Kreosote is said to contain, in addition to whatever may be the component parts of Firolyptol, 10 minims of creosote to each ounce. The advertisements for these two preparations seem to have for their keynote the assertion that cottonseed oil is a particularly valuable nutrient and that when combined with the constituents of Firolyptol and Firolyptol with Kreosote it becomes particularly valuable to the tuberculous. The Council discussed the extravagant claims made for these proprietaries; reminds that food and fresh air, not drugs, constitute the fundamentals of the treatment of tuberculosis; and finds that neither of the products is acceptable for New and Nonofficial Remedies (*Jour. A. M. A.*, Feb. 17, 1917, p. 564).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" were found misbranded under the U. S. Food and Drugs Act chiefly because false and fraudulent therapeutic claims were made for them: Collins' Ague Remedy, admittedly containing 33 $\frac{1}{2}$ per cent. alcohol.—Swaim's Panacea containing nearly 5 per cent. alcohol, 58.5 per cent. sugar, 0.1 per cent. salicylic acid and some sarsaparilla.—Swayne's Panacea, essentially the same as Swaim's Panacea in composition.—Croxon, capsules containing a white pill and a red oil: the oil was oil of pine or oil of juniper dissolved in a fatty oil, while the pill consisted essentially of strychnine, a trace of brucine, aloin, hexamethylenamin, lithium carbonate, potassium nitrate and probably a trace of atropin.—Freeman's Balsam of Fir Wafers, lozenges consisting of sugar with very small amounts of oil of turpentine and eucalyptus with the possible presence of balsam of fir.—Renne's Pain Killing Oil, essentially a water-alcohol solution of sassafras oil and cayenne pepper containing 78.6 per cent. alcohol and 4 per cent. volatile oils and possibly a little mustard oil and soap.—Schuh's Yellow Injection, an aqueous solution of boric acid, carbolic acid and berberin.—Schuh's White Mixture, a mixture of mucilage of tragacanth, balsam of copaiba, and probably sandalwood oil, flavored with cassia.—Elmore's Rheumatic Goutaline, apparently a dilute tincture of colchicum.—Armstrong's Croup Ointment, containing eucalyptus and traces of other oils, possibly cassia and thyme.—Anticephalalgine, containing 30 per cent. alcohol and 4 grains acetanilid to the ounce, sodium bromid, sodium salicylate, caffeine and antipyrin.—Wright's Rheumatic Remedy, an emulsion composed principally of turpentine, methyl salicylate, sugar, acacia, and water, with probably some resinous or plant extractive matter.—H. G. C., a watery solution of borax and berberin sulphate.—Russell's White Drops, containing 13 to 16 per cent. of alcohol as well as codein.—Pneumovita, a sweetened gum, containing small amounts of charcoal and iron phosphate having a wintergreen flavor.—Mecca Compound, an ointment containing carbolic acid, camphor, borates, zinc compound, sodium soap in a soft paraffin base.—Best Cough Remedy, a spearmint syrup containing alcohol, chloroform and morphin.—Stella-Vitae, a female weakness remedy.—Vegetable Pulmonary Balsam, a syrup flavored with spearmint, sassafras, containing alcohol and opium (*Jour. A. M. A.*, Feb. 17, 1917, pp. 565 to 566; Feb. 24, 1917, p. 651).

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BINIODOL.—The Council on Pharmacy and Chemistry reports that Biniodol is claimed by the manufacturer, Charles C. Yarbrough, Memphis, Tenn., to be a solution of 1 per cent. mercuric iodid and 2.75 per cent. guaiacol in a vegetable oil and that it is marketed with the implication that it is new and superior to other oil solutions of mercuric iodid. The Council found that the claims of novelty and of superiority were not substantiated by the evidence. Clinical investigation did not demonstrate the effects of Biniodol to be different from those of solutions prepared in the A. M. A. Chemical Laboratory, with and without guaiacol. The Council declared Biniodol inadmissible to New and Nonofficial Remedies because claims of superior efficiency were not established; and because it is an unessential modification of an established non-proprietary article marketed under a proprietary name (*Jour. A. M. A.*, Feb. 24, 1917, p. 650).

BOOK REVIEWS

THE MEDICAL CLINICS OF CHICAGO. Volume 2, No. 4 (January, 1917). Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

In this issue the very important subject of acidosis is discussed by Wright, Assistant Professor of Physiological Chemistry in the Northwestern University Medical School, who is thus introduced to readers of these clinics. Case, the well-known roentgenologist, has a clinic on "barium diagnosis." Beifeld talks on

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"purpura hemorrhagica." Abt discusses more aspects of feeding and nutrition of infants. Strouse gives a forcible and splendid talk on "the diagnosis of early active pulmonary tuberculosis"; Portis, one on "Carcinoma of the Rectum"; Hamburger, on "achylia gastrica"; and Williamson on "splanchnoptosis." Clinics by Tice, Hamill, and Mix make up the additional material in this volume.

SKIN AND VENEREAL DISEASES. Volume IX of the Practical Medicine Series for 1916. Edited by Oliver S. Ormsby, M.D., Professor and Head of the Department of Skin and Venereal Diseases, Rush Medical College; and James Herbert Mitchell, M.D., Hyde Memorial Fund Fellow, Assistant in Cutaneous Pathology, Rush Medical College. Cloth, \$1.35. Price of series of ten volumes, \$10.00. The Year-Book Publishers, Chicago.

The first one hundred pages are devoted to a review of the various dermatoses. The rest of the book—some 120 pages—is devoted to the review of genito-urinary diseases. Just about one hundred pages are devoted to the subject of syphilis. The reviewers evidently realize the importance of this subject and they certainly give it the attention it deserves. Their review of this subject leaves nothing to be desired. Every physician ought to read it.

Attention must be called to the following sentence which occurs at the bottom of page 224: "Who could not tolerate neither salvarsan nor diarsenol." That such an error could get by both the editors and the proof-reader seems strange.

CARE OF PATIENTS UNDERGOING GYNECOLOGIC AND ABDOMINAL PROCEDURES. Before, During and After Operations. By E. E. Montgomery, M.D., Professor of Gynecology in Jefferson Medical College, Philadelphia. 12 mo., 149 pages, with 61 illustrations. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$1.25 net.

It is very interesting to note that the author conceived the idea of this monograph while convalescing from an operation recently. At first he decided to prepare some instructions for his assistants, but after having gotten into the subject he found it necessary to extend the work until it made up this volume.

The suggestions and instructions contained in this book, if followed, ought to improve the team-work of all those concerned with the care of gynecologic patients who are to undergo operation. The work of the operator would thus be facilitated and inevitably lead to better operative results.

This work, then, should be of value to the younger operators, and particularly to interns and nurses.

A TREATISE ON DISEASES OF THE SKIN. For the use of advanced Students and Practitioners. By Henry Stelwagon, M.D., Ph.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Eighth edition, thoroughly revised. Octavo of 1,309 pages, with 356 text-illustrations, and 33 full-page colored and half-tone plates. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$6.50 net; Half Morocco, \$8.00 net.

This book is so well known everywhere that extensive comment is unnecessary. It need only be emphasized that the new edition shows many changes and contains considerable new matter. Much that has become obsolete in dermatology and many of the older and less desirable cuts have been eliminated, so that the author has succeeded in including all the new matter without increasing the size of the book very much.

About thirty-five new cuts have been added. The illustrations are plentiful and excellent. Their value as an aid in presenting the subject matter of dermatology cannot be over-estimated.

In presenting this new edition the author has brought his text-book up to date, and is thereby keeping up its reputation as one of the best—if not the very best—work on dermatology to be had at present.

THE NEW METHOD IN DIABETES. The Practical Treatment of Diabetes as Conducted at the Battle Creek Sanitarium, Adapted to Home Use, Based on the Treatment of More than Eleven Hundred Cases. By J. H. Kellogg, M.D., LL.D., Chief Medical Director of the Battle Creek Sanitarium. Cloth, \$2.50 net. Battle Creek, Mich.: Good Health Publishing Company, 1917.

This book is intended not so much for physicians as for nurses and diabetics. There is no doubt that there is a real need for a good practical book on diabetes that will give both nurses and intelligent people the general and special knowledge they should have. Having this knowledge, both nurses and patients could cooperate successfully with the physician in controlling the course of this disease.

In addition, this book supplies a variety of suitable and wholesome recipes for use in planning an appropriate diet for diabetics. The fifty pages devoted to this side of the subject contain very valuable and very useful information. Indeed, one cannot speak too highly of the practical value of the information presented in this special chapter.

The author knows how to present the subject matter so that it can be easily read and understood by anyone with ordinary intelligence. In simple, concise language he has given the important points with reference to diabetes to those who really need them. His book, therefore, is of distinct value to those for whom it is intended.

A TEXT-BOOK ON THE PRACTICE OF GYNECOLOGY. For Practitioners and Students. By W. Easterly Ashton, M.D., LL.D., Professor of Gynecology in the Graduate School of Medicine of the University of Pennsylvania. Sixth edition, thoroughly revised. Octavo of 1,097 pages, with 1,052 original line drawings. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$6.50 net; Half Morocco, \$8.00 net.

Ashton's book on Gynecology already is known very well by both practitioners and students. The fact that this work has gone through five previous editions tells more eloquently than words of the popularity of this text-book.

This new edition has been carefully revised; many changes of various kinds have been made; and new matter has been added in many of the chapters. The work has been gone over thoroughly and brought up to date in every respect.

Cancer of the uterus receives the emphasis that such an important subject ought to get. The author evidently realizes the value of presenting this subject to the general practitioner in such a way as to enable the latter to cooperate in lessening the morbidity and mortality of uterine cancer.

There are a great number of illustrations, many of them splendid and all of them helpful in the presentation of the subject matter.

This new edition will not only maintain the reputation that Ashton's work already enjoys, but will even enhance it very materially.

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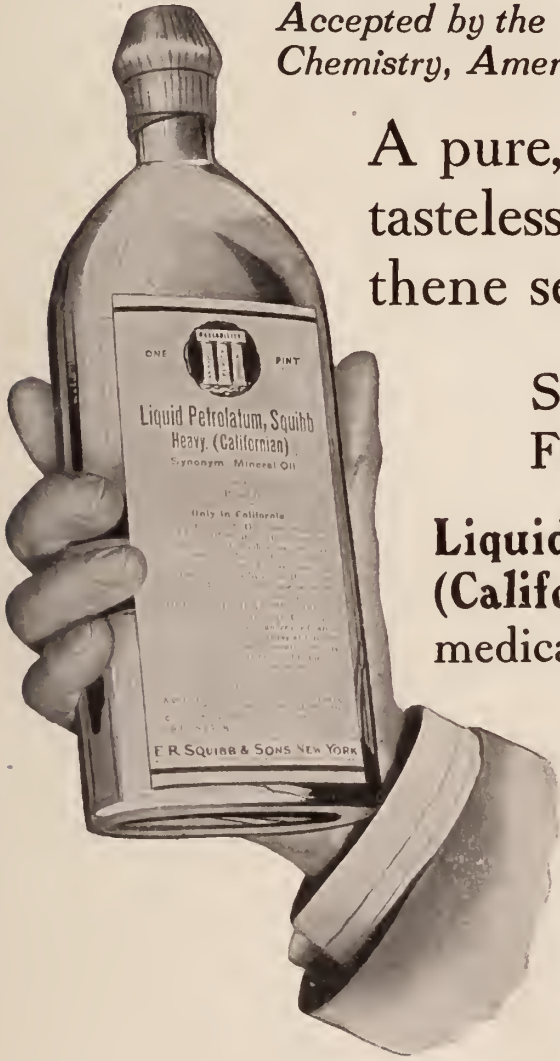
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OF THE

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ISSUED MONTHLY under Direction of the Council

VOLUME X
NUMBER 4

FORT WAYNE, IND., APRIL 15, 1917

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CONTENTS

ORIGINAL ARTICLES		EDITORIALS	
	PAGE		PAGE
Occlusive Drainage for Empyema of Chest. Demonstration of Operation and Instruments. Maurice I. Rosenthal, M.D., F.A.C.S., Fort Wayne.....	135	Facial Infection	151
Roentgen-Ray Diagnosis of Mastoid Disease. Albert M. Cole, M.D., Indianapolis	139	The Doctor's Duty in Times of War.....	153
Infections of the Mastoid: Skiagraphy and Other Aids to Early Diagnosis. William F. Clevenger, M.D., F.A.C.S., Indianapolis	140	Cooperation of Medical Men for Economic Advancement.	152
Errors in Diagnosis of Diseases of the Accessory Sinuses. J. Maurer, M.D., Marion, Ind.	143	Doctors Have an Opportunity to Advance Indiana.....	154
SPECIAL ARTICLE		Renovate and Fumigate the Moving Picture Theaters.....	154
Medical Preparedness. By the Council on National Defense, Washington, D. C.	147	Interpretation of Total Disability Clause in Insurance Policies	154
		Pseudo-Doctors Not Wanted in War Times.....	155
		Unwarranted Leniency to Farmers.....	155
		Editorial Notes	156

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS	PAGE	MISCELLANEOUS	PAGE
Indiana State Medical Association	168	Deaths	163
Indianapolis Medical Society	170	News Notes and Personals	164
Bartholomew County Medical Society	173	The Truth About Medicines	177
Elkhart County Medical Society	173	Book Reviews	179
Huntington County Medical Society	175		
Lake County Medical Society	177		
Madison County Medical Society	177		

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Evansville, September 26, 27 and 28, 1917

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ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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VOLUME X

FORT WAYNE, IND., APRIL 15, 1917

NUMBER 4

ORIGINAL ARTICLES

OCCLUSIVE DRAINAGE FOR EMPY- EMA OF CHEST. DEMONSTRATION OF OPERATION AND INSTRUMENTS*

MAURICE I. ROSENTHAL, M.D., F.A.C.S.

Surgeon to St. Joseph's Hospital

FORT WAYNE

The cure of empyema of the chest is brought about by the approach and adhesion of the visceral to the parietal pleura and consequent obliteration of the pus cavity.

The treatment by drainage, with or without resection of one or more pieces of rib, may result finally in adhesion between the pleura and in cessation of pus formation. This has been the operation of choice in practically all cases. When, however, as quite frequently happens, this operation does not result in cure then we must resort to the frightfully deforming operation of removal of the ribs and placing in this manner the parietal in opposition to the visceral (Schade).

The treatment then resolves itself into one of two procedures; first, drainage with or without resection, which if successful is usually a long drawn out affair with the consequent constitutional damage which goes with long continuous suppurative disturbance; secondly, if as so frequently happened, drainage resulted in no cure, then resort to the Schade operation.

The treatment of empyema of the chest seemed to be most satisfactory, taking into consideration the very simple requirements for a cure, namely, causing the visceral pleura to come in contact with the parietal pleura while at the same time allowing a free escape of pus. Unfortunately opening the chest and allowing air

to enter the pleural cavity at once defeats the main requisite for cure of the condition. The lung at once collapses and further separates itself from the costal surface, leaving a still larger cavity. Thus the treatment at once defeats the probability of cure. My first attempt to evacuate the pus from the chest and at the same time to expand the lung was made about twelve years ago. I placed a patient in one of the treatment rooms at the Saint Joseph's Hospital in a very high bed, fixed a tube in the pleural cavity through a small incision and made the same as near air tight as I could with rubber washers and adhesive plaster. Then I fixed the distal end to a water air pump actuated by a faucet in the wash stand much after the method used in exhausting kaolin filters in the laboratory. This procedure proved unsuccessful; the negative pressure in the chest being constant resulted in leakage about the tube. It later occurred to me that the respiratory movement of the diaphragm itself offered sufficient motive power to evacuate the chest and by resort to a proper valve air could be prevented from entering. To accomplish this I devised the following operation:

Insertion of tube into the chest by means of a specially constructed trocar and cannula, and fixation of tube to chest by means of adhesive plaster, the tube to be left hanging dependent about 24 inches long to act as a discharge tube and at the same time a syphon. The end of the tube is cut at a long angle (see Figs. 1 and 2). Over this is placed a very thin rubber tube somewhat larger than the drainage tube (originally I used an ordinary condom with both ends open). This tube is tied in place so that it overhangs the drain about three inches. The thin tube will act as a valve excluding air from the chest on expiration and allowing the escape of pus and consequent approach of the lung to the ribs on each inspiration. Sterile adhesive plaster should be used, as I find it much

* Read before the Indiana State Medical Association at the Fort Wayne session, September, 1916.

less irritating about the wound and much better tolerated by the skin. The thinner the tube the better the valve action.

The construction of the trocar and cannula must be correct for the proper insertion of the tube through the chest wall. The cannula should be flat and just large enough to allow the tube to pass. The cannula must be straight, its sides parallel and not tapering, otherwise there is difficulty in passing the tube and in securing an air tight fit in the intercostal muscles. The cannula should not exceed from $1\frac{1}{8}$ to $1\frac{1}{2}$ inches in length. I have had considerable difficulty in making the instrument makers understand these points. The trocar should be

since 1910. In nine cases average time for healing was 31, the shortest time 7 days and the longest time 96 days.

When the cavity is quite obliterated and there still persists a slight amount of drainage the tube is removed and a braided bundle of silk worm gut substituted. In a few cases I have poured $\frac{1}{2}$ to 1 ounce more or less of sulphuric acid ether through the tube into the chest to act as an antiseptic.

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Fig. 1

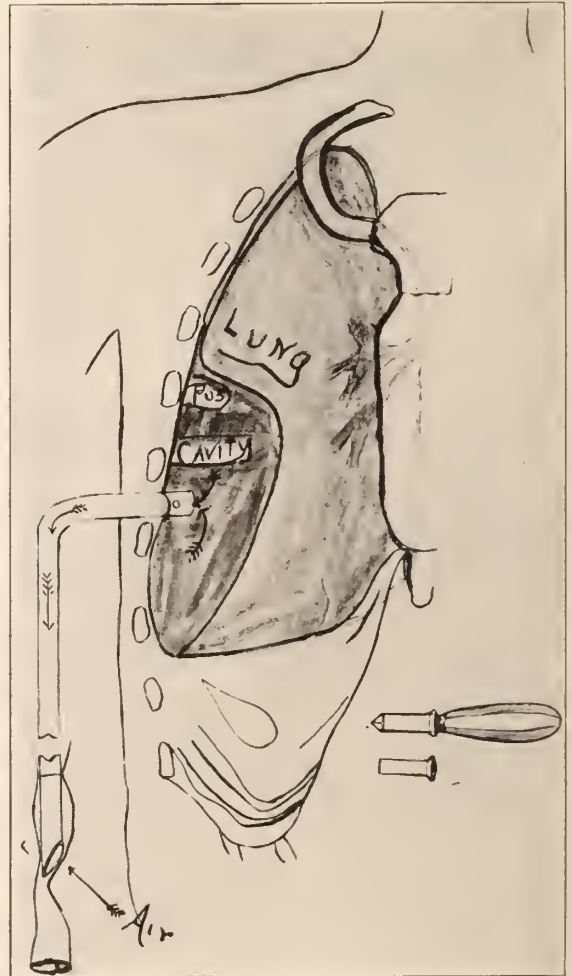


Fig. 2

inserted just over the upper margin of the rib to avoid the intercostal vessels. I have had no difficulty on account of hemorrhage in any case.

The operation can be performed in about one minute under local anesthesia. Many of these cases come for operation in very much reduced condition, so that the simplicity of the operation adds another material advantage.

I have been doing this operation exclusively

DISCUSSION

H. R. ALLEN, Indianapolis: May I say a word in regard to the mechanical proposition involved here? Instead of using a water pump or air pump we have a tube coming out here (indicating), and we use the diaphragm for a pump. The Sprengel air pump will work constantly, whether there is any pus to pump out or not. It goes on pumping with a free vacuum.

As to the idea of this pump, it is controlled by the diaphragm and as such air or pus is forced out here (indicating). A soft piece of rubber tissue or condom is fixed across the beveled edge and it acts exactly like a valve and prevents the inflow of pus or air, so that you cannot pump pus up into the cavity. You have a guarantee of pump action with every breath. You have a bevel cut on the lower end; the soft rubber tube goes over it so that when air comes in the soft rubber fits over the bevel and makes a check valve. Nothing can flow up. There is no danger of admitting anything from the air because it is blocked off by soft rubber tissue which is mechanically a check valve, and the patient is not exposed to the violence of the Sprengel air pump.

DR. GEORGE F. BEASLEY, Lafayette: This is the neatest device I have ever seen. I opened up chests in the day when we did resections in cases of empyema, and the convalescence of those patients was long and drawn out. The trouble is to keep it clean, as there is an immense amount of gauze and absorbent cotton on the side. Dr. Rosenthal certainly is to be congratulated on this ingenious device.

DR. JOHN C. FLEMING, Elkhart: There are a number of questions in regard to the details and management of these cases that I would like to ask Dr. Rosenthal about.

It certainly is a very ingenious method for combating a condition which is often a source of great annoyance. Personally, I have always worked from the other side. I have started my patient to expand his lungs by blowing through a wind instrument or a toy balloon, or to blow bubbles and attempt to encourage positive pressure from within rather than encourage negative pressure from without.

In the first place, do I understand that Dr. Rosenthal inserts this cannula and pushes the rubber through that, and draws the cannula over the end of the rubber tube? In the second place, how often does this tube get stopped up?

We know from experience in these cases that very frequently a rubber drainage tube becomes occluded, so that many practitioners put in two tubes to overcome that. It seems to me, there is a possibility of the rubber tube becoming occluded, and if so, what method does he use to clean it out? Then I would like to know what method he uses to fasten this tube to the chest wall? Here is a tube with the long end hanging out, and the short end in the chest would be easily displaced. What method does he employ to fix that to the chest, and does he have any trouble with leakage between the edges of the chest wall and the tube?

DR. M. R. LOHMAN, Fort Wayne: In no case have I found the tube occluded so that it had

to be taken out. There was free drainage all the time. Sometimes the drainage was only a drop or so at a time; at other times it was freer.

In regard to the adhesive strips to hold the tube, in the cases that have been in the hospital for some time we did not have to change them for three or four weeks following the operation. They have remained firm, and there is no secretion of pus around the tube because the ends of the cannula fit exactly, and for that reason it fits the incision in the skin. A good many of the patients have gotten out in three or four weeks in which there is no change at all.

DR. JOHN C. FLEMING, Elkhart: Does Dr. Rosenthal make a small incision in the skin and thrust that cannula and trocar in, or does he thrust the cannula and trocar in through the skin too?

DR. LEONARD F. SCHMAUSS, Alexandria: I would like Dr. Rosenthal to explain a little more concerning the collapsing of the lung. I think it is interesting to most of us who have had experience with lung surgery. If the pleura is opened, it is supposed that the lung collapses. What will overcome this condition afterward? With this apparatus how will the lung regain its normal volume, or will it not? Perhaps it will, but does it do any harm for the lung to collapse when the cannula is put in or will it straighten itself out in the recovery?

The trocar which Dr. Rosenthal has exhibited is similar to the Ingals trocar which has been on the market for fifteen or twenty years.

DR. CHARLES M. MIX, Muncie: I have nothing to say other than this: the chief advantage of Dr. Rosenthal's method is not a question of priority in the manufacture of instruments but it is the fact that it works.

DR. J. CHRISTOPHER O'DAY, Portland, Ore.: I have been particularly interested in the subject of pneumothorax, and in the last six years I have devised an apparatus to take the place of managing the gas used by Murphy and others with a technic of my own. The principle involved in Dr. Rosenthal's paper amounts to this: When a chest in which there is a normal lung opened, there is atmospheric pressure on the inside in the bronchi, and there is atmospheric pressure which has been admitted into the pleural cavity which ordinarily balances the proposition. When the lung was developed in embryo, it was developed to collapse and to remain so until the birth of the child, when on the first inspiration it became inflated, and in so doing carried with it the reflection of the parietal pleura which, at that time, becomes the visceral pleura, filling it until it fills the thoracic cavity. In the lung itself you have enough musculature to give it elasticity which tends to give the lung, even though in a condition of pneumo-

thorax or plus pressure, respiratory movement. One can leave a lung collapsed with nitrogen gas for weeks and weeks and recollapse, and when the time comes you think the cavity is healed, and the individual is safe from hemorrhage, you can let the gas go on to complete absorption and the lung will return to approximate the parietal pleura. That same condition will obtain when you use atmospheric air as we have been doing in Portland. It is also true, but not to the same satisfactory degree, when the chest has been filled up with a serous fluid. Now then, comes what? Your infection. To go back just a minute I will quote Dr. Matson of Portland. When you have an infection creeping into the lymphatics, beginning at the stomata in the squamous or pavement epithelium, there is a sudden change in inspiration and respiration, thereby making a valve-like movement which is responsible for the pigmented lung in the coal miner. Whenever infection gets to the cortex of the lung, you have what? The same thing that obtains in an infected appendix. An exudate is thrown out. Why? To protect as far as possible the resorption of the toxins which develop in the lymph and become pus. Inasmuch as nature walls off the appendix, she tries to wall off the lung in the same way and to hold that infection locally in the pleural cavity. The longer that is exposed to the pressure of the pus, and the pus being absorbed under pressure more readily than without, the cortex gets thicker and thicker and fibrous and more fibrous, and finally, when you open the chest, the lung cannot go back, and those are the cases in which you do an Estlander operation and a Schede operation to bring the wall back to the lung somewhere. When the fibrosis has just begun you are on the border line, and you want to get the lung back even though it is a little thickened; you try to exclude atmospheric air from the cavity to give the lung the advantage of all the elasticity which has been left. You have done it by having the patient blow water from one bottle into another and back again to force the lung out. Those are the principles as I see them, involved in Dr. Rosenthal's paper and his ingenious instrument to overcome this very thing.

DR. ROSENTHAL (closing): These instruments are to be had in most any of the instrument stores. I have a number of them here. A point to be emphasized is that they should be correctly made so that the rubber tubing will fit snugly.

I will take the liberty of bringing out a few details in answer to questions in this discussion. In addition to the rubber tubing fitting snugly, it is best to lubricate the tubing before you attempt to put it through the cannula. The

original trocar which I had made under my supervision transmits the tube, and it does it nicely, so that when you have thrust the cannula into the empyemic cavity and withdraw the cannula you have a reasonably tight-fitting rubber tube. That is one essential. If the cannula is made tighter as they ordinarily are, then you will have difficulty in introducing the tube, or after you have introduced it, if you have an opening larger than the tube, you will get leakage. The instrument made for this purpose is not so easily procured. I have half a dozen of them that are practically worthless. If the cannula is too flat on either end you have difficulty in introducing the rubber tube, if it fits nicely, because the cannula must have sufficient clearance to allow the tube to pass through it when it is thoroughly collapsed, otherwise it would be impossible. You should draw out your tubing before you introduce it. These cannulae are too long; they should not be more than $\frac{1}{4}$ or $\frac{1}{2}$ inch to go through the chest wall.

As to the mechanism, we introduce the rubber tubing so that the end projects into the pus cavity and then we withdraw the cannula. As shown in the photograph, we then fix the tube to the chest wall by means of sterile adhesive plaster which is applied directly to the chest wall. We cut the adhesive plaster so as to have three strips hanging from the wound. We tear them about an inch apart, so that we have a broad base. One strip is placed over the tube and down to it; a second strip is wrapped around the tube, and another one applied under it in the same way. As shown by the photograph, that holds the tube in position. The patient is placed in bed for the first day or two. After that he is up and about. The main tube should be dependent. The valve-like action of this tube is easily shown. As I blow through the tubing the air goes through it. Instead of air on inspiration going through the tube, imagine that pus is going through it. As I take an inspiration, you see it close. I can blow through it, but no air comes back. There is a valve-like action with each expiration, depending on the elasticity of the lung. If the empyema has been of long duration and pus has remained in the chest for a long time and the lung collapses for a considerable time and has lost its elasticity altogether, this operation would be of no avail. We appreciate that because you cannot distend such a lung. It has become more or less fibrous, and then you have a proposition which is much more serious.

In the acute cases and in those as we usually meet them, ordinarily a diagnosis of empyema is made reasonably early. In those cases where the lung retains its elasticity, with each inspiration pus is discharged, the lung distends

itself, and we can be of material assistance by giving the patient a water bottle and telling him to blow or to hold his fists up to his mouth and blow. You do not want to distend the lung too much for the first two days. The lung should be distended gradually.

There are conditions where one rib has been resected and there is a large opening in the chest. Such a case can be treated on this same principle. Let us say a patient has an opening in the chest, a rib has been resected, to prevent air from entering the opening, simply hang a rubber dam apron about the chest, fix the rubber dam about the opening, and allow it to hang freely over the drainage tube. If this rubber dam is pinched lightly about the chest, you will have practically the same thing; with each inspiration pus discharges under this rubber dam. It will soil the dressings. You cannot control the direction of the discharge and with each expiration the rubber flops up against the opening. It does not occlude it as nicely as the valve, but it is the next best thing to it. I have treated a few cases in that way and my professional friends have done the same thing. The thinner the rubber tubing, the better it acts as a valve. A very thin tube will lie together when loose so it is difficult to separate. I have great difficulty in getting tubing thin enough. Heretofore I have been put to the necessity of using the ordinary condom, which is very thin, and which does very well if you cut the end off of it.

ROENTGEN-RAY DIAGNOSIS OF MASTOID DISEASE

ALBERT M. COLE, M.D.
INDIANAPOLIS

The Roentgen ray in mastoid disease is assuming an importance which warrants a very brief presentation. It has not as yet found universal appreciation; in fact most otologists are very indifferent to it but in many cases I am convinced it has its value.

Then outside of its value in mastoid disease the Roentgen plate of the mastoid region should become a routine procedure in every case of suspected brain tumor, abscess or meningitis. The renowned Politzer himself has said that the most extensive disease may exist in the mastoid without giving rise to a single symptom. In general septic infection the mastoid may be the source. While not so frequent an offender as the teeth, the tonsils, the nasal sinuses, the appendix or gall bladder, yet after

an investigation of these parts has failed to reveal any disease the mastoid should be considered and this is especially true if the symptoms center about the head.

As to the technic of making the plates, I shall say little. The tube must be angulated so as not to superimpose one mastoid on the other. Both sides must be taken for comparison. The interpretation of the plates are often most difficult, especially in the acute type. Here the otologist and the roentenologist must work hand in hand, correlate the clinical and Roentgen-ray findings and check up by operation.

The chronic types with bone destruction and pus or the old cases with sclerosis are usually very easy to distinguish. The acute types are much more difficult. We must differentiate the acute inflammatory type without bone destruction which generally clears up without operation, and the acute type with necrosis. With the first type we find our Roentgen plate showing a hazy or cloudy cell outline (serum or pus instead of air); the cells, however, are distinct. In the second class or necrotic type we have the same cloudy cell spaces and in addition there is seen a change in bone structure. In other words, the cells are broken down in whole or in part, and we fail to get sharp cell outlines.

In this differentiation of acute mastoiditis probably lies the greatest value of the Roentgen diagnosis in mastoid disease. It may give the surgeon the most accurate indications obtainable of when to operate and when to wait. Some of the border line cases may be difficult to interpret; but with better technic and wider experience there should be a small per cent. of error.

Dr. Lange of Cincinnati, who is the American pioneer from a Roentgen standpoint, tells me that almost without exception the otologists of his city have found the Roentgen plates of particular value in this acute type of disease. Probably Dr. Lange's skilful interpretation has won him his large following in mastoid disease.

In minor ways the Roentgen-ray findings in the mastoid region may be of some value. We may usually outline the lateral sinus and warn the surgeon when there is a forward lying sinus. Lange emphasizes the location of the floor of the middle fossa so as to guard against the penetration of the cranial cavity. We may also obtain some idea of the thickness of the tegmen tympani and the presence of cells in the base of the zygoma may be demonstrated. The semi-circular canals and ossicles may at times be shown.

INFECTIONS OF THE MASTOID: SKIAGRAPHY AND OTHER AIDS TO EARLY DIAGNOSIS *

WILLIAM F. CLEVINGER, M.D., F.A.C.S.
INDIANAPOLIS

Purulent mastoiditis, as ordinarily understood, implies a tender region over the cells with discharge of pus from the ear canal. This impression, as every otologist of experience knows, is in very many instances erroneous. No region of the human body varies so greatly in its anatomy as the temporal bone and this fact is responsible in part, in the infections which may be termed "indefinite," for the absence of so-called typical signs pointing to pus in that portion of the bone which comprises the cellular area, or in other words, purulent mastoiditis of the acute or subacute variety.

It will be remembered that the mastoid may contain pneumatic cells which represent the largest spaces possible, or the cells may be quite small, and in the latter instance are known as diploic cells. There is also the type of mastoid where both classes of cells mentioned are absent, the process being sclerotic and only the antrum present. A consideration of these anatomical facts, and others described later, will show the futility of any fixed rule in regard to typical symptoms of mastoiditis as generally understood and as understood by some of our members.

Mastoiditis may occur in the young child as well as in the adult, and it is interesting in this connection to note the wide variations in formation of the imperfectly developed temporal bone in infancy and early childhood.

The temporal bone at birth has many points of interest and some of vital importance to the aurist from the standpoint of diagnostic and operative significance. The average size of the temporal bone at birth is about one-fourth that of full development, and many of the well-defined points present in the adult type are absent or difficult to determine with certainty at birth or in the young child.

It has been frequently stated that there are no cells in the mastoid of infants and young children. This is relatively true only. In our own work cells have been demonstrated in a number of infant subjects, and a mastoid embodying all the characteristics of the adult type has recently been shown in a child of 8 months.

In other instances cells of the larger type were demonstrated during the first few years of life. In one-third of a series of postmortem cases, numbering 150, examined in the Lying-In Hospital in the City of New York, cells were found. These examinations were conducted from the service of Dr. James F. McKernon, by his assistants, and reported in the bulletin of that institution in March, 1913. In a large number of infant skulls operated on by myself and fellow-students in the Allgemeine Krankenhaus in Vienna, cells were repeatedly demonstrated and in quite a number the mastoid did not differ materially from the adult type.

The antrum is, however, the most important consideration in infancy and early life and is shown to occupy in this period an entirely different location or position than at puberty or in later years. The infant antrum, in most subjects, extends well forward above the tympanum to the anterior wall, but in some instances is found entirely behind the same. This condition applies also to early childhood.

Considering further anatomic facts of interest from a surgical point of view and relating to the infant temporal bone, the auditus is shown to be quite small and there is no floor or attic. The incus fills the larger portion of the auditus with its short process projecting into the antrum. This state entails care on the part of the surgeon in these cases in opening and curetting the antrum so as not to molest the incus and in turn the stapes.

In the adult type of mastoid certain definite principles are followed in surgical procedures, but my colleagues will, I am sure, agree to the extreme variation in bone formation. Surgery of this region is, therefore, a matter which requires accurate knowledge of anatomic outlines as ordinarily encountered and an appreciation of possible variations from the normal.

Cells in the fully developed temporal bone, as stated, vary in size and the floor of the mastoid cavity differs greatly even in the two mastoids of the same subject, which fact has, we believe, direct influence on unilateral involvement in certain instances. Practically no two adult temporal bones give the same measurement relative to the mastoid process, and especially is this true in regard to the position of the lateral sinus and facial nerve—the important considerations from a surgical standpoint in every instance of uncomplicated mastoiditis. It has been stated that otological surgery, no matter by whom performed, involves tentatively in each one hundred operations injury to the facial nerve, and this is likely a fair presumption.

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Just how often the lateral sinus is exposed intentionally or otherwise is a subject open for conjecture.

The facts outlined demonstrate in a measure the complete variations in anatomic formation of the region under consideration, and teach the ease with which one may injure vital structures in the performance of ordinary surgical measures for the relief of infections of these cavities.

The above mention of anatomic abnormalities of bone formation is necessary in arriving at conclusions in difficulties of diagnosis. It can readily be seen that the influence of the same on objective symptoms is absolute, and this brings us to the question of involvement of the mastoid cells and the causes leading up to the pathologic conditions found in this region.

There can be no question or doubt that the majority of cases of mastoiditis result from extension of inflammation from the nose or throat or both, and that infection takes place through the eustachian tube or tubes by continuity of tissue. The schneiderian and nasopharyngeal membranes and that lining the tubes are one and the same; and it is therefore obviously unlikely that the nasal or pharyngeal membranes may be seriously inflamed without the eustachian tube suffering more or less as a consequence. This it will be understood applies to the acute inflammations especially, but it is well known that the normal function of the delicate middle ear is dependent at all times on the nose and throat for maintenance of a physiologic state.

Deafness of the middle ear type, acute or chronic, may, therefore, be traced in almost every instance to abnormalities in the nasal, post-nasal or pharyngeal region. Doubtless the number of deaf people in our midst and the world over may be greatly reduced if it were possible to impress this one fact on the lay mind at a time in life when organic changes in the ear structure are absent, or in other words, in the incipient inflammatory period.

Granting statements in former paragraphs relative to mode of infection, it must be remembered in this connection that there are probably a certain per cent. of mastoid inflammations primary in character. These primary cases are, we believe, usually sequelae of typhoid fever or other forms of low-grade systemic infection, and result from circulatory toxemias or bacteremias direct.

The chief characteristics of the latter form of

mastoiditis is rise in temperature, variable in degree, pain and tenderness over the mastoid cells, discharge from the ear canal in some instances, but wholly absent in others, and certain definite changes from the normal in the color and position of the drum membrane. The membranous covering of the posterior bony canal wall in the region immediately over the antrum is invariably changed in color and thickness. Pain present is usually not acute but is constant and indefinite, depending on the virulence of infection, which controls in a very large measure the degree of tympanic pressure to be anticipated.

The above picture is of a series of symptoms familiar to my colleagues. Undoubtedly every aurist who has had opportunity to observe a large number of mastoid affections has in mind the clinical manifestations outlined.

In considering the variations in symptoms in mastoid infections we must therefore be governed by the knowledge that practically no two temporal bones will show the same measurements, and especially should it be remembered that the anatomical formations found in early life are likely to differ greatly in the ordinary case from that of adolescence. In both periods mentioned there is a possible absence of uniformity in bone formation, and, as stated, it has been conclusively shown that this region varies more perhaps in its construction than any other bony cavity. This being the case it will be appreciated that the antrum may be small and abnormally placed and accumulated secretions in the cell area thus retained, or, in other words, the mastoid may be practically a closed cavity. In such instance there is no opportunity for drainage and it follows that no matter what the bacterial infection may be, active or inactive, there is great danger of intracranial involvement sooner or later if left to its own course.

These infected closed mastoids often become necrotic and are without doubt exceedingly dangerous to life, as they represent a bony surface closely related to brain tissue, with pathologic changes taking place in the same. It will be appreciated that the internal plate or covering of the dura is very thin in all crania, and it follows that necrosis with even inactive invasion of the cells is of questionable safety relative to brain involvement.

Early diagnosis in mastoid infections is therefore most important and especially so in the type just outlined. These closed cases may go on for weeks or even months or may terminate fatally in a short period of time. In the former

instance the cortex and inner plate will usually be found thick and firm, while in the latter it is generally thin and easily perforated by necrotic tissue. Again it must be apparent that the character of infection has great influence on the activity of the pathologic state present.

It is interesting to note, in this connection, the bacterial infections found in the mastoid region. It has been repeatedly demonstrated by bacteriologists that a great variety of bacteria may be shown in a series of mastoid infections. The diphtheria bacillus has been found more or less frequently, and practically all of the group of micro-organisms, including the pyocyaneus, may be anticipated. This form of infection doubtless finds its entrance through the eustachian tube direct. Many of the other infections take place in a similar manner, but it is apparent that by no means is this a fixed rule and that infection through the blood stream is not an unusual occurrence. In the latter type the pneumococci and staphylococci are generally present and the more virulent forms of bacteria may be considered as possible only.

Taking up the diagnostic points of mastoid infection in its early stages we have to depend much on bacterial findings relative to the virulence of infection, and especially should it be remembered that an acute exacerbation of a chronic otorrhea is often of far greater significance than a first attack.

Ruttin of Vienna, who is recognized as one of our foremost otologists, classifies the capsulated and noncapsulated cocci and concludes that the latter is self-limited, running in the ordinary case a course of from two to six weeks, whereas the capsulated form is considered as of greater significance. Referring to the non-capsulated type, there is usually a period of three days when a serous exudate is present, and following this two weeks of purulent stage, and two weeks each of serous and catarrhal period.

Meningeal complications are unlikely in infections without the more virulent capsulated cocci, and in our own work this fact has been a source of satisfaction in dealing with otorrhea of varying degrees of persistency.

The physical condition of the subject should be considered as having direct bearing on resistance to the invasion of bacteria in any part of the body, and this law certainly applies to infections in the mastoid region. Tuberculosis and syphilis may influence infection and necrosis of the cells and should always be borne in mind. Either may influence in a serious manner the post-operative period.

As confirmatory evidence of the existence of mastoid infection, acute or chronic, the value of radiography cannot be overestimated. The findings are positive when properly interpreted. The two mastoids should be photographed and by so doing comparison of value may be made. In the work of excellent men engaged exclusively in radiography mistakes have been made and the interpretation of plates relative to mastoid pathology is difficult even when in the hands of expert Roentgen ray men. This may be in part attributed to the different formation of the cells in the same subject, which makes comparison of the physiologic and pathologic states difficult. There is a certain number of so-called border line cases where the skiagraphic production must be supplemented by microscopic findings and clinical records, and in this case as in no other the experienced otologist has a distinct advantage over the novice. The Roentgen ray specialist and aural surgeon may be of service one to the other in the final diagnostic routine.

Differentiation and classification of skiagraphic findings are of interest. Experience in our own work in conjunction with Roentgen ray men has taught the value of Roentgen ray plates as an aid in determining definitely the advisability of surgery. Pus in the cells does not necessarily mean, in every instance, surgical drainage, for as stated before the character of bacterial infection enters seriously into the problem. It will be remembered that in the closed mastoid it is quite impossible to procure pus for examination and in such instance it follows that the clinical findings and radiographic production must be depended on in the absence of possible bacteriologic tests. In such instance the question of necrotic bone tissue, granulations or pus, must be determined by the duration of the disease, temperature, blood and leukocyte count, supplemented by Roentgen-ray photographs.

It is quite possible, for those who are qualified to differentiate, in the vast majority of instances, between the various mastoid conditions possible, and the interpretation of plates and technic of Roentgen-ray work in general is without doubt a distinct and important specialty. We should therefore acknowledge our indebtedness to our co-workers along this line.

The ordinary acute mastoid infection familiar to all, characterized by rise in temperature, discharge from the ear canal, and tenderness of region over the cells with thickness of cutaneous and subcutaneous tissues, is of no consequence from a diagnostic point of view, but there are

a large number of infections, as for instance a cellulitis or circumscribed otitis externa, combined with a chronic purulent otorrhea, where the typical symptoms outlined are absent or difficult to differentiate, and in the types mentioned the radiographer and expert bacteriologist may render service to the aurist which by aiding in the early diagnosis of these affections will materially reduce mortality.

The complications of mastoid affections are numerous and embody points too intricate for present outline. An understanding, however, of the significance of a vacillating temperature with low pulse rate, or a tender region over the jugular, or nystagmatic affections in connection with aural disease, represent pictures more or less frequently encountered and will be understood or appreciated according to their meaning. These and other complications or sequelae of simple mastoid infection may be forestalled in the majority of instances by early diagnosis if followed by prompt mastoid drainage. The death rate in this class of infection should correspond proportionately to the mortality rate resulting from infections elsewhere in the body, as the appendix, gall bladder region, or fallopian tubes. A very low mortality in the latter-named affections is due without doubt to the admirable skill of our abdominal men and internists who aspire in every instance to early diagnosis.

It is difficult to fathom the attitude of members of the medical and surgical professions who persistently ignore the significance and dangers of purulent otorrhea. Fortunately in this enlightened period an understanding of the dangers of infection resulting from a purulent state of the mastoid or other regions of the body is generally appreciated and the source of infection, no matter whether it be the nasal accessory sinuses, alveolar process, abdomen or mastoid, is of no great concern. It is generally known that from the standpoint of systemic infection one may be quite as disastrous as the other.

The middle ear embryologically is composed of the eustachian tube, drum, ossicles, antrum and tympanic cavity which embodies the auditus. The mastoid, broadly speaking, becomes a part of the antrum, auditus and tympanic cavity, hence likewise the middle ear. Pus therefore in any part of the middle ear will of necessity generally invade the cells, the only safeguard being a small antrum, consequently the matter becomes significant mainly according to the character of bacterial involvement present.

To sum up, we should consider in the early

diagnosis of mastoid affections variations in symptoms due to:

1. Anatomic differences which produce a variety of objective and subjective signs.
2. Color and position of the drum membrane.
3. Color and character of membrane covering the posterior bony canal wall over the antrum.
4. Character of bacteria found in discharge. It will be remembered that discharge may be wholly absent.
5. Skiagraphic findings; certainly most important.
6. Three points of tenderness, namely, antrum, tip and vein. Sometimes absent due to heavy cortex.
7. Ordinary tests for middle ear deafness of value when accompanied by mastoid symptoms.
8. Indefinite cranial pain with slight rise of temperature following history of acute middle ear inflammation with or without discharge.
9. An understanding that there may be a total absence of tenderness on pressure, due to heavy cortex or to inactive infection.

Any one or all of the above classification when present will be of value in arriving at an early diagnosis, but the skilled use of the microscope and an understanding of the significance of bacteria found, as well as a full appreciation of radiographic production which should be shown in every doubtful instance, will be of more value than any means possible in the early diagnosis of indefinite affections of the region under consideration.

ERRORS IN DIAGNOSIS OF DISEASES OF THE ACCESSORY SINUSES *

J. MAURER, M.D.
MARION, INDIANA

If diagnosis is an art, then recognition of diseases of the accessory sinuses has produced few if any artists. Surgical text-books teem with descriptions of new nasal operations or embellish the old, but new developments from a diagnostic standpoint are wanting. If we could divorce the accessory sinuses from our list, we might well say that we have kept pace with other branches of medical science, but even the best rhinologists must admit that the sinuses are a mystery.

After having referred five cases to as many specialists of unquestionable ability in large

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medical centers where every facility for thorough examination was available, where every subdivision of the examination was given by a specialist in this particular line of work, and time proved that the diagnosis was wrong, has made me realize that diagnosis of the diseases of the sinuses is largely guess work. I also found that as the pathological condition was not revealed by the examination, that almost without exception tonsillectomy was advised, but where this surgical procedure had been performed, or where the ravages of diphtheria, Vincent's angina, or some other sloughing process had robbed the patient of these fee producing organs, the septum seems to be the next point of attack, and each specialist was inclined to suggest a surgical procedure and seemingly considered the diagnosis of minor importance. I could readily see where this advice had a two-fold effect. The consultant did not have to confess his inability in making a diagnosis, and this allows the patient to feel an adequate return for the time and expense involved in the trip. It also gave the local surgeon a chance for another fee. After this unpleasant and unscientific experience, I want to ask, "Are we deserving of the confidence that is placed in our ability by the laity or brother physicians? What is our opinion really worth?" After a thorough examination with every modern means, have we really rendered the patient a service, or complicated the conditions?

A patient coming to us for examination, referred by some physician who by the symptoms—subjective, objective, or both—believes that there may be some pathologic conditions in the accessory sinuses, if we see nothing indicating any disease, should we say that no pathologic condition exists because we cannot detect it, and decide the local conditions have nothing to do with the symptoms complained of, thereby compelling the physician to attribute the trouble to some other part of the body, possibly submit the patient to a long course of treatment, a trip to the sand dunes of Arizona, or some abdominal surgical procedure to find out later that the trouble was in the nasal sinuses. We at best are only guessing. It is poor judgment on our part, an absolute injustice to the patient, to say nothing of our embarrassment when our mistake becomes apparent.

I want briefly to give a few case histories to show that most severe pathologic condition can exist in the sinuses without detection by our present means of examination, and it is rather humiliating to feel that our deficiency in diagnosis is so great that it is really a hazard.

CASE 1.—Miss B., spinster, neurotic temperament, aged 40 years. Never had any serious illness. About eighteen months ago she began having light burning sensations in postnasal space with sensation of choking, slight feeling of fullness on the postpharyngeal wall. She described it as being air hungry, lasting from a few minutes to a day or two, then feeling fine. Evening temperature 99, pulse 80; had lost about 10 pounds in one year.

The throat showed small freely movable tonsils with small open crypts, the postpharyngeal wall on a line with the soft palate showed some thickening of tissue, with some angina due to the engorged veins. The nasal cavity showed deflected septum to right, but not in contact with any of the turbinates which seemed normal, as the wall space for aeration and drainage from the frontal sinuses and ethmoid cells and the history of no excessive discharge at any time made it seem impossible for disease to exist in the nasal sinuses. The use of the transilluminator was slightly positive on the right side. I opened the right antrum. Results, negative. Unable to make a diagnosis, I painted the nasopharyngeal membrane with nitrate of silver solution and gave adrenalin internally. This gave relief for several days. I then referred her to the roentgenologist, with negative results, his opinion being a possible tubercular condition, although the physical examination failed to substantiate his claim. She next spent six months in Colorado, where she was examined by several specialists, but made no improvement and came back home, as the nitrate of silver solution and adrenalin gave temporary relief. I sent her to Chicago where she spent two days in a hospital. After a careful examination by two well-known rhinologists, they advised that the tonsils be removed. Operation was refused. A month later the patient called up and said there had been a yellow discharge from the nose with immediate relief. Examination showed a purulent ethmoiditis of anterior cells. Operation and cure. Ethmoiditis was undoubtedly the cause of all the trouble. The Roentgen ray and local examinations were misleading at any and all times.

CASE 2.—Miss F., aged 26, typist. Tuberculous family history, but her general health was good. Began having sudden sharp severe pains over the right eye, coming on suddenly, lasting a few minutes, and leaving suddenly. The symptoms increased in severity and the attacks lasted longer. Refraction and glasses gave relief temporarily. No history of any nasal discharge; the nasal cavity seemed normal. Radiograph with the Speis method was of no aid, in fact was misleading, as the roentgenologist said if there was anything diseased, it was the left frontal sinus. Not being satisfied, I opened the right frontal sinus, intranasal; no relief, no discharge. Next injected supra-orbital branch

of the ophthalmic nerve with alcohol; temporary relief. The patient became so exhausted from the continued pain that I resected the supraorbital branch of the ophthalmic nerve. This was a failure. Then a Killian was decided on and performed. We found a necrosed external plate of the frontal. Result, cure. Here again the Roentgen ray and direct inspection were misleading.

CASE 3.—Mathew, aged 30, history negative. Complained of tickling sensation in thyroid region for six weeks and peculiar explosive cough with some expectoration; worse when lying down. Had been troubled with postnasal discharge for years, but no other pain or discomfort. Examination showed postpharyngeal wall coated with mucopurulent secretion. Nose showed instumescence with all tissues bathed with ropy mucus. Transillumination negative. Roentgen ray showed slight darkness over left ethmoid cells. Diagnosis, purulent ethmoiditis. Treatment, saline irrigation twice daily. Two days later patient better of discharge, but cough persisted. As this case had been treated for bronchitis with no results, I decided to open one antrum and chose the left. I found it clear, and not discouraged, I opened the right and washed out a dram of thick foul pus. Result, two treatments produced a cure. Here again the Roentgen ray was misleading.

Another case where the Roentgen ray gave a positive ethmoiditis was found to be an impacted molar.

Another case of frontal sinus polyps gave negative results both in direct as well as Roentgen-ray diagnosis.

A double antrum empyema found by Roentgen-ray negative.

These obscure cases come only too frequently, we might say daily, to every rhinologist. Then why not tell the patient that we have no positive method of detecting nonsuppurative diseases of the sinuses and that we must wait until some manifestation makes the diagnosis possible.

Conclusions drawn from our present method of examination close the door of health to thousands of patients afflicted with nonsuppurative sinusitis and we should exhaust every possible method at our command before we dismiss the patient with the statement that nothing is wrong as far as our specialty is concerned.

Let us briefly consider the routine method of examination as given by the rhinologist to the average patient who presents himself for examination.

Direct Inspection.—Direct inspection through the nares is very misleading. A nasal cavity with a straight septum, turbinates seemingly normal in size and not in contact with the septum or the external walls, healthy appearing

mucous membrane, no discharge or new growths, may still contain within the ethmoid, sphenoid, frontal, or antrum polypoid growths, necrosed tissue, acute or chronic inflammation, crypts and tumors, both malignant and benign. The use of the laryngeal mirror does not aid in this examination unless the disease has penetrated into the nasal cavity, and to say from this examination alone that no disease exists is almost worthless.

Transilluminator.—Anyone using the transilluminator can with a few days' trial demonstrate that it has very little value in the diagnosis of sinus pathology. Some writers contend that it is a reliable and valuable adjunct, but results fail to justify their claims.

Irregularity in the thickness of the bony walls will lead to an error. Thick or heavy walls render it valueless. The antrum and sinuses may be filled with purulent secretion where there are thin walls and still not cast a shadow. Where a patient has had antrum disease years before, there may be a distinct shadow on this side of the face. Its use is limited and findings must be coupled with other sinus symptoms to substantiate the diagnosis.

Roentgen Ray or Skiagraph.—Roentgen ray or skiagraph has of late years been considered a valuable agent not only as an agent to determine the size and shape of the cavities, but also of considerable worth in determining the internal pathological condition. Killian and Coakley are strong advocates of this method of examination, while Chisholm does not agree with them, his conclusions being that a swollen mucosa exercises a greater influence in causing shadows than any secretions in the sinuses. We must all agree that it has a wide range of usefulness, especially in the surgical field, but it is not at all a positive agent from a pathologic standpoint. The skiagraph to be of value must be made by an expert in this particular field. By an expert I mean a roentgenologist who is not only capable of making good head pictures, but must be able to interpret them. The general surgeon or possessor of a Roentgen ray in the smaller towns is not only frequently incompetent, but his opinion is very misleading and we cannot always rely on his judgment. The nearest approach to perfection in the hands of an expert is by the Speis method which calls for three pictures, namely, (1) anterior, posterior, (2) lateral, (3) chin-fortex, with head tilted backward so as to exclude the mandible, made with all the nasal tissues shrunk thoroughly by the use of cocaine before the exposures are made.

Realizing from past experience our utter helplessness in the detection of the nonsuppurative diseases of the sinuses and hoping to stimulate more effort from a diagnostic standpoint that we may some day have a modern Moses to lead us out of the sinus wilderness, when we can bid farewell to the term "catarrh," the use of the spray and douche and feel secure when we give an opinion concerning the sinuses, I offered this criticism.

Sarcastically, a noted eastern surgeon said that rhinology required the expert use of the nasal douche and the ability to use the eustachian catheter, and in every case resort to tonsillectomy and submucous resection.

Is there any wonder that rhinology and laryngology have not occupied, in general, the dignified position in the medical field that this important subject deserves?

Is it due to our unreliability from a diagnostic standpoint, or have we reached a commercial basis where we operate for a fee to the exclusion of the patient's best interests?

I have nothing new to offer, but want to call your attention to the too infrequent exploring of the sinuses for diagnostic purposes. While not original, nor very scientific, it proves interesting to note the increased percentage of diagnoses in many cases where we would fail by more scientific means.

Exploring the sinuses may be necessary as an aid in cases where it is not convenient to have a Roentgen ray. In some cases the patient has neither the time nor can afford the expense for a Roentgen ray, and frequently the Roentgen ray fails to cast a shadow when only a small amount of secretion is present in either the antrum, frontal or ethmoid.

Exploring the antrum, the frontal and the anterior ethmoid cells is a very simple process. First, opening of the antrum with a curved trocar under the inferior turbinate, or the use of the Andrew's knife under the middle turbinate. This method is harmless to the patient, painless and of the utmost diagnostic value. The opening of the antrum and irrigating same with a normal salt solution is a routine in an Eastern clinic whenever there is the *slightest* suspicion that there might be any secretion. They have been amply repaid by so doing, as it frequently demonstrates the existence of disease where other methods failed. If the irrigating solution returns clear, free from odor, return flow not obstructed by polypoid or other new growths, it is reasonable, coupled with other negative sinus symptoms, to suppose that the antrum is not diseased.

The opening of the anterior ethmoids and the frontal sinuses by removal of the bullae with the use of double-biting forceps. This also is a very simple procedure which can be performed at the office, does not inconvenience the patient and eliminates a lot of guess work.

The method used it to first apply cocain paste to the anterior end of the middle turbinate and over bullae and *aga nasi*. This operation consists of placing the ends of the biting-forcep opened about $\frac{1}{4}$ of an inch against the bullae, gripping the blades $\frac{1}{2}$ inch below the nares, push the instrument upward and backward until the finger that was placed $\frac{1}{2}$ inch below the nares is in contact with same.

This operation can be performed in 90 per cent. of the cases without removal of the anterior end of the middle turbinate. This prevents any serious damages, as the ethmoids are always over $\frac{1}{2}$ inch in depth. Here, too frequently, you are rewarded by finding your pathology, and the subsiding of symptoms in a few hours; if not, you have the satisfaction of knowing that the disease probably does not involve the frontal and ethmoid. These methods, just described, are always resorted to where the patients have been referred to this clinic where the physical examination by competent physicians is negative, where the eye, ear, nose and throat showed no distinct pathologic change, where the teeth have been examined, not by the dentist, but with the aid of a Roentgen ray, and where there is a suspicion that some diseased conditions might be present in the sinuses.

Bearing in mind that the abdominal surgeon has no scruples in making an exploratory laparotomy, why should we hesitate to open the sinuses for a similar purpose?

True, some reports show some bad results. Some operators claim that the opening of the antrum or the ethmoid, or the removal of a portion of the turbinates may be followed by an atrophic rhinitis, but I am compelled to believe that a thorough examination of the nasal cavities will demonstrate that in many cases the *Diplo Bacillus Foetidis* Perez has already invaded the posterior end of the inferior turbinates and postnasal space, the usual site of the beginning of attack long before the operation was performed.

I have not included the sphenoid, and while I am sure that thousands of chronic cases exist, but by our present means of examination remain unrecognized, but I do not believe in exploring same, only as a last resort, as it is not as accessible and in most cases the middle turbinate must be removed to explore same.

SPECIAL ARTICLE**MEDICAL PREPAREDNESS**

BY THE COUNCIL OF NATIONAL DEFENSE
WASHINGTON, D. C.

Under existing conditions it is desirable that every physician as well as every other loyal citizen of America should be prepared to render active service to the Federal Government, remembering that the protection afforded by the government has made it possible for its citizens to enjoy liberty, peace and prosperity.

The avenues through which the most effective service can be rendered by members of the medical profession have taken definite and concrete form. Briefly, the plan is that all medical activities should cooperate with the Council of National Defense.

It would seem desirable at this time to state explicitly just what the Council of National Defense and its various agencies are.

The Council of National Defense was created by act of Congress, Aug. 29, 1916.

Sec. 2. That a Council of National Defense is hereby established, for the coordination of industries and welfare, to consist of the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, and the Secretary of Labor.

That the Council of National Defense shall nominate to the President, and the President shall appoint, an advisory commission, consisting of not more than seven persons, each of whom shall have special knowledge of some industry, public utility, or the development of some natural resource, or be otherwise specially qualified, in the opinion of the council, for the performance of the duties hereinafter provided . . .

That the Council of National Defense shall adopt rules and regulations for the conduct of its work, which rules and regulations shall be subject to the approval of the President, and shall provide for the work of the advisory commission to the end that the special knowledge of such commission may be developed by suitable investigation, research, and inquiry and made available in conference and report for the use of the council; and the council may organize subordinate bodies for its assistance in special investigations, either by the employment of experts or by the creation of committees of specially qualified persons to serve without compensation, but to direct the investigations of experts so employed.

A committee of distinguished men was asked to present to the president names of medical men suitable for membership on the advisory commission. Dr. Franklin H. Martin of Chicago was selected.

The following statement was issued by President Wilson on the night of Oct. 11, 1916, in announcing his appointment of the civilian

advisory members of the Council of National Defense:

The Council of National Defense has been created because the Congress has realized that the country is best prepared for war when thoroughly prepared for peace. From an economic point of view there is now very little difference between the machinery required for commercial efficiency and that required for military purposes.

In both cases the whole industrial mechanism must be organized in the most effective way. On this conception of the national welfare the council is organized in the words of the act for "the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the nation."

The organization of the council likewise opens up a new and direct channel of communication and cooperation between business and scientific men and all departments of the government, and it is hoped that it will in addition become a rallying point for civic bodies working for the national defense. The council's chief functions are:

1. The coordination of all forms of transportation and the development of means of transportation to meet the military, industrial and commercial needs of the nation.

2. The extension of the industrial mobilization work of the Committee on Industrial Preparedness of the Naval Consulting Board and complete information as to our present manufacturing and producing facilities adaptable to many sided uses of modern warfare will be procured, analyzed and made use of.

One of the objects of the council will be to inform American manufacturers as to the part which they can and must play in national emergency. It is empowered to establish at once and maintain through subordinate bodies of specially qualified persons an auxiliary organization composed of men of the best creative and administrative capacity, capable of mobilizing to the utmost the resources of the country.

The personnel of the council's advisory members, appointed without regard to party, marks the entrance of the non-partisan engineer and professional man into American governmental affairs on a wider scale than ever before. It is responsive to the increased demand for and need of business organization in public matters and for the presence there of the best specialists in their respective fields. In the present instance the time of some of the members of the Advisory Board could not be purchased. They serve the government without remuneration, efficiency being their sole object and Americanism their only motive.

As indicated above, the Council of National Defense therefore consists of six members of the Cabinet as follows:

The Secretary of War, chairman.
The Secretary of the Navy.
The Secretary of the Interior.
The Secretary of Agriculture.
The Secretary of Commerce.
The Secretary of Labor.

The Advisory Commission of the National Defense consists of seven civilians appointed by

the president. The members of the Advisory Commission are as follows:

Mr. Daniel Willard, president of the Baltimore and Ohio Railroad, chairman.

Mr. Hollis Godfrey, LL.D., president of Drexel Institute, Philadelphia.

Mr. Howard E. Coffin of Detroit (who is also chairman of the Committee on Industrial Preparedness of the Naval Consulting Board).

Dr. Franklin H. Martin of Chicago.

Mr. Bernard Baruch, financier, of New York.

Mr. Julius Rosenwald, vice president of Sears, Roebuck & Co. of Chicago.

Mr. Samuel Gompers, president of the American Federation of Labor.

The two bodies meet in joint session at frequent intervals for the purpose of considering problems relating to national defense.

The executive activities of the Council of National Defense are coordinated and carried out through the medium of the director of the Council of National Defense, Mr. W. S. Gifford, and the chiefs of the various departments represented by the members of the Advisory Commission. Dr. Frank F. Simpson is chief of the Medical Section of the Council of National Defense.

THE ADVISORY COMMISSION

The organization of the council and of the Advisory Commission provides that each member of the Advisory Commission shall gather about himself for the most effective coordination of the activities he represents, a committee or board consisting of representatives of governmental departments on the one hand and civilian members on the other hand.

The Medical Committee, of which Dr. Franklin H. Martin is chairman, consists of:

William C. Gorgas, surgeon-general of the U. S. Army.

William C. Braisted, surgeon-general of the U. S. Army.

Rupert Blue, surgeon-general of the U. S. Public Health Service.

Col. Jefferson R. Kean, director-general of Military Relief of the American Red Cross.

Dr. William H. Welch, member of the National Council of Research.

Dr. William J. Mayo, chairman of the Committee of American Physicians for Medical Preparedness.

Dr. Frank F. Simpson, chief of the Medical Section of the Council of National Defense, and secretary of the Committee of American Physicians for Medical Preparedness.

Many medical problems which have bearing on the national defense are considered by Dr.

Martin's committee and by the Advisory Commission and the Council of National Defense before being put into action by the governmental departments concerned.

COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS—ITS COMPONENT PARTS

National and State Committees.—In April, 1916, the national committee was appointed by the joint action of the presidents of the American Medical Association, the American Surgical Association, the Congress of American Physicians and Surgeons, the Clinical Congress of Surgeons of North America and the American College of Surgeons. To that committee was delegated the responsible duty of formulating plans whereby the civilian medical resources of the United States might be ascertained and effectively coordinated for such purposes as might be required by the Federal Government.

The national committee organized, selected a chairman and secretary and an executive committee, and appointed a state committee of nine strong men in each state of the Union.

It is the fixed policy of this committee that all presidents and secretaries of the various state medical societies shall be members of their respective state committees during their incumbency in office. From the first it was contemplated that at the proper time the organization of committees would be perfected in each county of the country. That time has now come and county committees are being rapidly organized.

In each instance the state committees are expected to select the county committees and to supervise their formation.

Name and Personnel of County Committees.—It is the fixed policy of the Committee of American Physicians for Medical Preparedness that the various important medical interests and activities of each county shall be represented on the county committees. This is done for the purpose of coordinating the important interests and activities so that the medical profession of the nation may present a compact and effective organization for the purpose of aiding effectively in the national defense. In order that this plan may be carried out with uniformity and precision throughout the country, the various state committees have been requested to have all county committees bearing the following distinguishing name, to wit, The Auxiliary Medical Defense Committee of _____ County, in _____ State. The state committees have also been requested to provide that the county

committees shall include the following in their list of members:

1. All members of National Committee of the Committee of American Physicians for Medical Preparedness, resident in the individual county.

2. Members of the state committee resident in or near the individual county.

3. Representatives of the U. S. Army resident in the individual county.

4. Representatives of the U. S. Navy resident in the individual county.

5. Representatives of the U. S. Public Health Service resident in the individual county.

6. Representatives of the State Board of Medical Examiners residing in the individual county.

7. Representatives of the state or city public health service.

8. Ranking medical officer of the National Guard.

9. President and secretary of the local medical officers' reserve corps association, if there should be such an organization.

10. Deans of medical schools.

11. President and secretary of the county medical society.

12. President and secretary of any other important medical societies.

13. Medical director of the local Red Cross units.

14. Other representative medical men.

DUTIES OF COUNTY COMMITTEES

From time to time specific duties will be assigned to the various state and county committees. These duties will be in accord with the policy of the Council of National Defense, and should be executed promptly and precisely by those who are called on to cooperate in this manner with the Council of National Defense.

The committees will call to their assistance those who have been appointed field aides by their various state committees and such other physicians as they may desire to have cooperate with them.

Among the specific duties which the county committees are requested to perform at this time are the following:

1. That these committees cooperate with the national and state committees of the Committee of American Physicians for Medical Preparedness in their efforts to gain needful information regarding the civilian medical resources of their own communities, and in their efforts to coordinate civilian medical activities for prompt mobilization in case of need.

2. That they secure applicants:

- (a) For the Army Medical Corps. If the president should call the full complement of troops already authorized by Congress, the Regular Army would need about 1,200 additional medical officers. If a million men should be called, a corresponding increase would be required.

- (b) For the Medical Officers' Reserve Corps from 20,000 to 30,000 medical reserve officers should be enrolled.

- (c) For the Naval Medical Corps which needs about 350 additional officers.

- (d) For the Coast Defense Reserve Corps of the Navy. Several hundred high class reserve medical officers are desired.

- (e) For the National Guard, such numbers as may be required to bring your local National Guard to full strength.

In the preparation for national defense the first thing needed will be medical officers.

Physicians recommended for such service should be of the highest type. They should be free from suspicion of addiction to drugs or drink.

Medical officers who go to field duty should by preference be under the age of 45.

3. That they cooperate, individually and collectively, with the Medical Department of the Army, Navy and Public Health Service and with the Council of National Defense.

4. That they cooperate with the Red Cross in their efforts to bring that organization to the highest point of efficiency.

Committee of American Physicians—Activities Accomplished and in Progress.—April 26, 1916, the Executive Committee of the Committee of American Physicians tendered the services of the committee to the president of the United States. He expressed himself as being pleased with the patriotic tender of services and regretted that existing laws did not permit the acceptance by the Federal Government of gratuitous services, but stated that the matter would be referred to the Secretary of War and the Secretary of the Navy for the purpose of devising plans by which the good offices of the medical profession could be accepted and utilized to best effect by the Federal Government. He further stated that the plans would be referred to the Committee of American Physicians for comments and suggestions. The Executive Committee was permitted to make suggestions regarding the bill creating the Council of National Defense.

During the last year this committee and its various subsidiary bodies have been actively en-

gaged in formulating and carrying out various activities in conformity with the general plans for national defense, which have been undertaken by the Federal Government.

The splendid work done by the various state and other committees was of such extent and value that the Council of National Defense at its first meeting requested the Committee of American Physicians to continue their various activities under the guidance of the Council of National Defense, and asked the secretary of the Committee of American Physicians to act as chief of the Medical Section of the Council of National Defense. Since that time the various activities have gone forward with renewed energy.

Some of the activities which have either been completed or are well under way follow.

1. Some 20,000 medical men selected from all parts of the country have been classified according to the training and the kinds of work which they do best.

2. An inventory of hospitals and other medical institutions is well under way.

3. It has been the fixed policy of the Committee of American Physicians to aid the American Red Cross in bringing its medical department to the highest point of efficiency. With that object in view, and in order to foster the spirit of cooperation, the members of the National Committee of the Committee of American Physicians accepted invitations to become members of the national committee of the medical department of the American Red Cross. In order further to promote the harmonious cooperation of the two organizations, most of the members of the various state committees of the Committee of American Physicians were also made members of the state committees of the American Red Cross. The various county committees will also be expected to cooperate in carrying out the plans of the two organizations.

4. The establishment of military training for senior medical students in a large percentage of the high grade medical schools of the country.

5. The establishment of more effective military training for hospital groups for members of the Medical Officers' Reserve Corps, for dental students and others.

6. The appointment of a Committee for the Standardization of Medical and Surgical Supplies and Equipment. The purpose of this work is to designate a list of articles essential to the successful conduct of civilian and military medical and surgical activities so that in the event that it should become necessary to curtail production all the energies of the drug and instru-

ment makers would be devoted to necessary articles rather than to those which are desirable but not essential. On this Standardization Committee are representatives of the army, the navy, the Public Health Service, the Red Cross, the Council of National Defense and a number of the most distinguished members of the various specialties of civilian medicine. In their work of coordination and standardization this committee will take counsel with the manufacturers of the various supplies under consideration.

7. Much valuable information supplied by medical and other observers who have worked in the war zones of Europe is being gathered and classified.

8. The presidents of important national medical organizations of the country have been requested to suggest to the medical section of the Council of National Defense the kinds of work which members of those organizations are best fitted to perform, and to suggest plans whereby their activities and resources might be utilized to best advantage. This request does not contemplate an inventory and organization of these resources. The purpose is that having received suggestions offered by the various organizations, those suggestions will be maturely considered and such as conform to the plans of the Council of National Defense and can be utilized to advantage, will be adopted. The various organizations will, in that case, be requested to cooperate fully and promptly in perfecting the plans of the Council of National Defense.

The foregoing memorandum embodies only a very small percentage of the problems now under consideration. It is neither wise nor desirable, however, to present them in detail at this time.

THE hysterical scramble to show patriotism and due respect to the Stars and Stripes is a little amusing in the face of our knowledge that as a general thing Americans have been the least patriotic and shown the least respect for their flag of any civilized people on the face of the earth. However, it is never too late to mend, and it is quite satisfying to most of us to know that public sentiment, if not patriotism, is compelling many individuals to respect our flag. When the present troublous times are over—and let us hope that universal peace is not far distant—every citizen of the United States should feel that his flag represents not only liberty and enlightenment, but protection to all that is worth living for.

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EDITORIALS

FOCAL INFECTION

The country is at war. In the minds of most as the cause and excitant of various types of disease seems already to be definitely established. It is assumed that some of the bacteria present in these foci of infection and their toxins—whatever the nature of these may be—get into the circulation. By their activity there and in the special tissues or organs for which they may have a selective affinity, they produce morbid changes. These changes are very diverse, so that the symptoms they give rise to are also quite variable.

For the relief of these symptoms obviously the most important step is to detect the source of infection and eradicate it. This is not always easy; in fact, not infrequently it is very difficult, and occasionally it may even be impossible. No effort should be spared, however, in the attempt to locate the seat of infection. Every available method or procedure that can be of aid in the discovery thereof ought to be carried out.

This applies particularly with reference to the teeth. The fact that very often the foci of infection occur around the teeth has been demonstrated conclusively. More and more are we becoming impressed with the significant rôle that dental or peridental infection plays in the causation of symptoms of apparently obscure origin. When such infection is discovered and proper treatment instituted the first rational step in helping the sufferer to recover will have been taken. Unfortunately, however, infections around the teeth in many cases go on unrecognized too long. Dentists, in particular, must be censured for such a state of affairs. Time and again do they decide that teeth are normal when they are not. The trouble is that most of the dentists have not yet learned the value of the Roentgen ray as an aid in the detection of localized foci of suppuration around the teeth. Many physicians also have not yet learned that, and

no doubt they also are to blame to a certain extent. Physicians and dentists must learn to cooperate with each other in arriving at the truth. They need each other in cases of this kind. When in doubt, one should get the opinion and advice of the other. The sooner dentists get the correct point of view of this problem, and practice accordingly, the less frequently will we see long-standing unrecognized cases of focal dental infection.

The tonsils also have been blamed as being among the worst offenders from the standpoint of harboring foci of infection. Removal of the tonsils, therefore, has been advocated with the greatest enthusiasm by some internists and especially by the laryngologists. Whenever really indicated, this operation undoubtedly is of the greatest benefit, but the indiscriminate removal of tonsils, in the absence of definite evidence that they are really doing harm, ought to be condemned and stopped. The indications for tonsillectomy are fairly well known now; also the contraindications are known. Experience already accumulated shows without doubt that in some of the conditions for which tonsillectomy has been urged and performed no good has followed. In every case there should be distinct evidence that the tonsils are foci of infection and are doing harm before they are condemned and enucleated.

The accessory nasal sinuses also have been looked on as being capable of lodging foci of infection within them. In suspected cases of sinus infection the Roentgen ray often is very helpful in detecting the presence or absence of infection. It is well worth while to focus the attention on these structures when searching for the seat of a focal infection.

It must not be forgotten, however, that the sites of focal infection are by no means limited to the teeth and the nose and throat. The importance of the genito-urinary tract in both the male and female, including the urinary bladder, and, in addition, the gallbladder and perhaps the intestinal tract—especially the large intestine—must be emphasized.

Obviously the detection of the source of a focal infection may not be an easy matter. Even though the source may be obvious, the search should be no less thorough or complete, for another source or other sources of infection may be found at the same time. Every possible source of focal infection ought to be investigated, and every available method of examination that is necessary ought to be used. Certainly it will require a great deal of time and

effort, but it will be time and effort well spent. A conclusion reached without such a method of study is apt to be misleading and lead to faulty clinical judgment; but with all available data at hand, the clinician is better able to formulate a correct decision as to the diagnosis, prognosis and treatment.

THE DOCTOR'S DUTY IN TIMES OF WAR

The country is at war. In the minds of most Americans the cause is a righteous one. The unfortunate phase of the situation is that we are totally unprepared. No matter how boastful we may be concerning our resources—and we must admit that we are the most boastful people on earth—yet the plain, unvarnished truth is that we are unprepared, according to present-day standards, for war, and despite the warnings of those who have appreciated the necessity for being prepared, our country has gone blindly on, lulling itself into security with the thought that if the worst comes we shall be able to marshal our forces and our resources on the spur of the moment and combat nations that for many years have been on a war footing. How absurd and illogical. We are like the child that cannot realize that the stove is hot when told so, but must of necessity learn the fact by burning the fingers.

But this is no time "to cry over spilt milk," though the very realization of our negligence should spur us on to unusual energy in preparing for a war that may require such a sacrifice of human life and treasure as American people never expected to see and which will make previous wars of the United States pale into insignificance. There should be and there will be a ready response to the nation's call for assistance in the hour of trouble, and among services offered none will be in greater demand or more appreciated than those of the medical profession. As was the case in our Civil War, and later in the Spanish-American War, the medical profession has led all other volunteers in offering services to the country. It must be remembered, however, that not all doctors can engage in army or navy service, for every populous community must be able to secure medical attention when required, and a certain percentage of doctors must remain at home to furnish such attention.

Our soldiers and sailors must have munitions and supplies, and of necessity a large part of our working population must continue to work

to supply the army and navy with those munitions, as also with food, with clothing, and in fact everything that goes to make up the many and varied requirements of warfare. Those who remain at home to do this work are serving their country as well as those who are in the field, even though perchance with less risk of life. But on the physicians, who, through age, family responsibilities, or physical incapacity are obliged to remain at home, even though if they followed their own inclinations they would be engaged in military service, a duty falls that would not be considered binding during times of peace. This duty embraces the care of the interests of those physicians who have responded to the country's call and gone to war, leaving behind them their lucrative practices, their property interests, and perhaps their families.

In no better way can the true professional spirit be manifested, to say nothing of an exhibition of patriotism that is in entire keeping with the times, than by acting as a guardian and protector of the practice and the family interests of the doctor who follows the colors. Aside from the fact that we urge—perhaps unnecessarily as there will be a ready response—that those doctors who are in a position to serve the country in its hour of peril and need shall respond to the call for medical recruits, we particularly urge that doctors who remain at home shall deport themselves in a manner that does credit to a profession that is ever self-sacrificing and noble by assuming the responsibilities of their confrères at the front, and be prepared at the close of the war to deliver those responsibilities unharmed and undisturbed. This is a time for self-sacrifices and noble deeds. The medical profession will not be found lacking in any of the attributes that should find full expression in times like these.

COOPERATION OF MEDICAL MEN FOR ECONOMIC ADVANCEMENT

It is becoming more and more apparent that insurance companies as a general thing pursue a definite policy of imposition in their dealings with individual members of the medical profession. This is evident from the attitude assumed in the offers that are made to physicians to secure their services as regular examiners, as it also is evident from the offers that are made by not a few companies in efforts to settle any and all claims for medical services for which the insurance companies are liable. Indiana physicians need not be surprised to find that a

concerted effort will be put forth to lower any and all fee schedules that exist at the present time; for, as one general agent expresses the matter, "there are several localities in Indiana where a complete physical examination, including a urinalysis, is secured for \$2, office dressings at 50 cents and major operations for not to exceed \$25; and the time is coming when my company or no other company will pay anything more." We believe this statement is grossly exaggerated, and is put forth solely with a view to brow-beating those doctors who expect and demand fair and respectable compensation for their services. However, the incident is illuminating, and shows that it is about time for members of the medical profession as individuals to cease dealing with insurance companies, for unless there is some unity of action the rank and file in the medical profession will suffer.

The practice of medicine should never get down to the level of a trade or business, but there is every reason why business methods should be used by the doctor for the protection of his profession and for the protection of himself. Little respect will be shown the physician of the future if he is the cringing and suppliant servant of those who have robbed him of his independence and who dictate his conduct. With the coming of health insurance, state medicine and legal restrictions governing the question of fees for medical services there will be scant return on the investment of time and money required to make a well-equipped doctor. The lack of organization and unity in the medical profession is responsible for this growing tendency to make the practice of medicine unprofitable as well as undesirable, for with little effort put forth to protect itself, the medical profession is sacrificed to the greed of those who are ever aiming to prosper at the expense of others.

We have seen the standards for the practice of medicine lowered to the point where in most states a person with a common school education and little or no medical training can begin the practice of medicine providing he holds himself out as belonging to one of the numerous pseudomedical cults; we have seen the great insurance companies deliberately cut fees for medical examinations at a time when the services exacted and rendered are deserving of more compensation than ever before in the history of life insurance; we have seen legislatures fix the fees that physicians shall charge for services rendered injured employees, and we complacently accepted a ruling that compensation shall cover services rendered within a thirty-day period, though we are morally and

legally bound to continue the service until the patient is able to be discharged, whether the time is thirty days or thirty months; we have suffered from many legal restrictions on the practice of medicine that are unnecessary, illogical and tyrannical in effect, brought into being by those who have no interest in or sympathy for the aims and objects of the medical profession; and we are aware of the fact that each session of the various state legislatures adds to our burdens by the passage of more oppressive legislation, and all because we fail to organize our forces and unify our efforts to prevent unfavorable action against us. We complacently and apathetically permit every one to impose on us, and all because we consider ourselves professional men and that as such it is beneath our dignity to adopt the means and measures used by other classes of people as a means of protection.

What the medical profession needs and can have is a powerful organization that through force of numbers, unity of action and influence can protect itself, and, of far greater importance, protect the aims and objects for which the profession stand. Self-preservation is just as necessary for the medical man as it is for the craftsman. There is just as much reason for medical men to cling together and adhere to certain principles and certain standards as there is for the laboring man to abide by the dictates of his union. The practice of medicine will fall into disrepute within a very short period of time unless medical men make some effort to change the general trend of today. There is room for a closer affiliation and a keener sense of obligation which one doctor owes to another and which he owes to his profession. An effort to work for the common good must be put forth by every doctor. He must be made to feel that the interests of all are his individual interests, and that he cannot expect his interests to be safeguarded without safeguarding the interests of others. In other words, nothing can be accomplished for either the individual or the class without cooperation, and that means personal sacrifices and work for the common good.

The plan of the Indiana State Medical Association of having an executive secretary or manager who is not a medical man, and who is not expected to practice medicine, is a move in the right direction toward securing an organization that through force of numbers and individual and collective influence is able to protect itself from harmful, unwarranted and even malicious legislation, and to promote the high ideals for

which the profession stands. Every doctor in Indiana should give a reasonable amount of his time and money, when called on to do so, when he knows that such sacrifice means benefits for himself, the profession at large and indirectly the public he serves. He will be called on more than once by the executive office for such cooperation as indicated, and he who fails to respond to the call will hurt himself as well as the profession, for it is through the help of every member of the profession that the best results will be secured. We have long delayed the act we are now taking, but let us by our enthusiasm, enterprise and work make up for lost time.

DOCTORS HAVE AN OPPORTUNITY TO ADVANCE INDIANA

The director of the U. S. Census informs the state board of health that Indiana will be admitted to the U. S. Birth Registration Area if 90 per cent. of the births are registered. It will be a distinction and an honor to our state to achieve this position. If the position is secured it will be an honor to the medical profession. If the honor is allowed to pass, it will discredit the medical profession of Indiana.

It is of vital importance to mothers and babies that births be legally registered. Complete professional service to mother and child is not rendered until the due record of the birth is made by the attending doctor. Reporting of births is also a legal, social and professional duty. The law requires the attending physician or midwife to report births within thirty-six hours after occurrence, and the real physician as well as the real citizen will not fail in meeting all legal duties.

RENOVATE AND FUMIGATE THE MOVING PICTURE THEATERS

A very fertile field, primarily, for the work of the State Board of Health, and, secondarily, for the work of local boards of health, is the moving picture theater. Of all the insanitary, badly ventilated and disease-breeding public places, the average moving picture theater takes the prize. People going into crowded moving picture theaters often remark that the atmosphere is thick enough to cut with a knife and the odor almost unbearable, and yet seldom is anything done by the health boards or the management of moving picture theaters to correct the trouble. Instead of putting up such a howl about some far less objectionable condi-

tions, which perhaps are affecting but a limited number of people, why not pay a little more attention to moving picture theaters, where there is a real need of reform in ventilation and sanitation?

There are, of course, some sanitary moving picture theaters, like those that have been created from well-ventilated and sanitary theaters constructed in the past for theatrical purposes, but by far the greater number of moving picture theaters, cheaply and hastily built for the purpose, or created out of some abandoned store building, are absolutely unfitted for the purposes to which they have been put. While our boards of health are condemning insanitary and unhealthy buildings, and especially school buildings, let them get busy and condemn hundreds of moving picture theaters in Indiana that deserve to be closed up because they are insanitary and unhealthy, and, because of their construction and arrangement, never can be anything else. Nearly all of the moving picture theaters in Indiana need renovating and fumigating about three times per day, and even then they would fall far short of being worthy of approval by a good health officer.

INTERPRETATION OF TOTAL DISABILITY CLAUSE IN INSURANCE POLICIES

The editor of THE JOURNAL recently has filled out an indemnity blank for a health and accident insurance company covering attention rendered a policy holder. When the policy was taken out the applicant for insurance was given to understand that sickness or injury preventing him from following his vocation would entitle him to total disability indemnity under the terms of the policy. Casual reading of the policy also indicates as much, though a careful perusal shows that through a technicality occasioned by skilful wording of the policy, total disability is construed as meaning confinement to bed. The policy holder, being a railroad engineer, was totally incapacitated from performing his usual duties by a serious eye inflammation. In making his claim for indemnity the applicant was asked to make an affidavit stating whether at any time during his illness he was able to leave his bed or the house, and if at any time medical or surgical services were rendered at the attending physician's office instead of the house. As few eye inflammations confine the patient strictly to bed, or even the house, the applicant for indemnity stated that he visited the physician's office for treatment, but that he was

totally incapacitated for work. The company, therefore, sent a check for partial disability, and this constituted but a small fractional part of what was due under the total disability ruling.

We contend that such an action on the part of any insurance company is contemptible and not in keeping with fairness or justice. In other words, it is ample reason for the attention of our courts, but more especially our legislatures. There are altogether too many one-horse insurance companies that take the advantage of policy holders in every conceivable way, and because they are permitted to draw up contracts in the shape of policies that are entirely and alone in the interest of such companies. If there was a united action on the part of the people in securing legislation that would insure fair treatment from insurance companies, and we possessed laws that placed a proper interpretation on clauses that pertain to total disability, there would be few occasions for the complaints that now arise concerning settlement in health and accident indemnity claims.

PSEUDO-DOCTORS NOT WANTED IN WAR TIMES

The United States is at war, and the call has been sent out for enlistment of thousands of doctors, but we note that there is no request from the government for chiropractors, osteopaths, Christian Scientists, and all the other pseudo-medical cults and pretenders. No, the country, in times of war, pestilence, or serious trouble of any kind, asks for *real* doctors, and not doctors of the "make believe" type. And when you come right down to "brass tacks" isn't it a fact that the members of these pseudo-medical cults, who boast so loudly as to what they can do to relieve suffering mankind, and who, as a result of an indifferent regular medical profession and a tolerant public, are permitted to practice among our people, are aware of the fact that they are incompetent and hopelessly inefficient in times of stress? They know that they are worse than useless on the battlefield or in the military hospital, and they very wisely refrain from offering their services, even though they might, through patriotic feelings, desire to respond to the call for help.

This condition of affairs should have its lesson with the people. If the chiropractors, osteopaths, Christian Scientists, and others of their ilk — pretenders in the fullest sense of the term — are not competent to treat our sick and wounded soldiers and sailors, why should they

be considered competent to treat the sick and wounded in our civil population? The public should be made to understand that the medical officers of our army and navy are selected from the regular medical profession because the regular medical profession is the only one that has been adequately and sufficiently trained for the work. It is education and training that the government service requires, and it doesn't make any difference whether it comes with the tag of the regular medical profession or the tag of osteopathy or chiropractic. It is good, dependable service that the government requires, based upon education, training and experience, and it doesn't make any difference to the government under what name that service comes. It so happens, however, that the regular medical profession is the only one that comes up to the requirements. As much should be required by the people in civil life in any community.

UNWARRANTED LENIENCY TO FARMERS

A large percentage of the doctors in Indiana do the bulk of their work for farmers. It is a well-known fact that the average farmer sells everything he produces for spot cash, and seldom if ever gives any credit to any one, though he himself requests and receives unusual credit on all of his bills. Furthermore, the average farmer, no matter how prosperous he may be, complains about poor crops, hard times and the difficulty of meeting his obligations. At the present time, when the high cost of living bears heavily on nearly all classes of people, the farmer joins with the rest in putting up loud complaints concerning his difficulty in making both ends meet, but a little analysis of the situation proves that except in rare instances the farmer is not entitled to the sympathy that he encourages.

There was no general shortage of crops last year, and everything produced on the farm sold and is at present selling for prices two, three and even four times more than obtained in many years past. The farmer admits this, but he claims that the cost of living is so much greater. However, most of his living comes from the farm just as it has heretofore, and he is selling the surplus just as he has done heretofore. It is true that what he has to buy costs him more than it did two or three years ago, but the percentage of increase on the limited amount of clothing, groceries and implements he buys is no where near in proportion to the

increase in the price of the commodities he sells. He therefore has no cause for complaint when for every dollar of increase in the cost of what he purchases he gets an increase of anywhere from \$2 to \$5 on everything he sells. In fact, it is known that farmers as a class have paid off more mortgages, made more investments, and are purchasing more luxuries than ever before in the history of the country. There is scant reason, therefore, for the doctor, who really is paying more in living expenses while getting no more for his services, to grant increased leniency to farmers in the payment of bills for professional services, as we know to be the case in some communities. The doctor, like every one else in these strenuous times, is being pressed for money to meet living and operating expenses, and he should have no qualms of conscience in urging the farmer to pay bills with unusual promptness. There never has been any particular reason why the farmer should be given such extension of credit as usually has been granted him, and there is far less reason for it now when the farmer is among the most prosperous of our people.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

WE sincerely hope that THE JOURNAL readers will not overlook our department devoted to New and Nonofficial Remedies and the Propaganda for Reform. That department contains information that is of value to every practicing physician, and it deserves a careful reading each month as it appears.

"Why is it that all the accident cases handled by the police ambulance are 'fractured skull' cases?"—The Fort Wayne News, April 7, 1917.

The medical profession is making a strenuous effort to raise the standard of competency, efficiency, and morality within its ranks. The

desired results will be accomplished quicker and better through the aid of the public. Judging from the editorial query herewith reproduced it is evident that the public is beginning to get wise, which leads us to believe that eventually we shall have the cooperation of the public in improving the standards of the medical profession.

It may seem rather suggestive, but the fact remains that a majority of the malpractice suits defended by the Medical Defense Committee of the Indiana State Medical Association are against members who are not very active in medical society work, and in several instances the members scarcely make a pretense of attending medical societies, but keep up membership as a matter of form. Probably if the truth were known the county medical society secretaries are obliged to keep nagging these men for their dues.

IN all probability the complement-fixation test for tuberculosis, like the Wassermann test for syphilis, has come to stay, and it is only a question of time before it will be widely used. There are, however, some difficulties to be experienced in making the test reliable, and these difficulties are not alone confined to the selection and preparation of the suitable antigen, but in having the process simple and yet reasonably trustworthy. There must also be taken into consideration the interpretation that is placed on the results, but this comes with experience, and its reliability will likewise depend on the carefulness with which the test is carried out.

RECENTLY the Fort Wayne newspapers carried a news item that a certain "doctor"—naming a well-known optician—would talk to the parent-teacher club of one of the schools of the city, on the subject "The Eyes and General Health." This same optician is prescribing for and treating eye diseases, and even writes prescriptions for eye drops to be used by his patrons. Really, there is no reason why we should have any medical laws, for the people stand for anything, and our boards of medical registration and examination apparently make no effort to prevent anyone from practicing medicine whether they know anything about medicine or not.

THE Council on National Defense of Washington, of which Dr. F. F. Simpson is chief of the Medical Section, has submitted an outline of the activities that now are under way in connection with medical preparedness, and, on request, the same is published in this number

of THE JOURNAL. It may be well to suggest that our readers should cooperate fully with the surgeons-general of the army, the navy, and the United States Public Health Service, and with the Council on National Defense, through the medium of The Committee of American Physicians for Preparedness, with its strong national, state, and county committees. It also is desirable that they cooperate fully with the American Red Cross in its sphere of activities.

THERE is a pressing need for more men in the Medical Department of the Army and Navy, and this is an opportunity for the younger men in the medical profession. There also is need for more men in the Medical Reserve Corps of the Army and Navy, and this offers opportunity not only for the young men in the medical profession but the older ones as well. Those desiring to offer their services should write to Surgeon-General Braisted of the Navy, or to Surgeon-General Gorgas of the Army, Washington, D. C., stating their age, when and where graduated in medicine, in what practice they have been engaged—what specialty if any—and when they would be ready to respond to the call. This letter should be accompanied by two letters of recommendation from two physicians in good standing in the medical profession.

THE *New York Medical Journal* announces the addition to its staff of Dr. Smith Ely Jelliffe of New York. Dr. Jelliffe has specialized in the study of nervous and mental diseases and has written much on this subject. Among his latest books are "Modern Treatment of Nervous and Mental Diseases," by White and Jelliffe, published in 1913; "Diseases of the Nervous System, a Textbook on Neurology and Psychiatry," which appeared in 1915; and Appleton's Medical Dictionary, published in 1916. Aside from this, Dr. Jelliffe has published the *Journal of Nervous and Mental Diseases* for the past fifteen years. The addition of Dr. Jelliffe, as well as Dr. Charles E. de M. Sajous, to the editorial staff of the *New York Medical Journal* speaks well for the future of that publication, and we look not only for the continuance of the high character and value of the *Journal*, but even an advancement toward the ideal.

MOVING pictures are destined to play an important rôle in medical teaching. The College of Physicians and Surgeons of New York intends using moving pictures as a part of its course of instruction, and already has given a demonstration of the value of moving pic-

tures in enabling students to observe difficult operations and learn the technic, by introducing 5-reel pictures of the removal of goiter, and the removal of stones from the bladder. This method is a distinct step in advance, and for the reason that if a student fails to see an important part of a surgical operation, or acquaint himself with any features of the technic, it is quite impossible to do the operation over for his benefit. On the screen, however, he may observe all of the minute details of any difficult operation as often as necessary.

COUNTER-PRESCRIBING by druggists is a far greater evil than generally given credit. In fact there are any number of people who depend on the nearest drug store for medical attention for all minor ills. That this practice is attended with danger is attested frequently by the discovery of serious conditions that would have been recognized earlier but for the intervention of the prescribing druggist. These counter-prescribing druggists are practicing medicine in every sense of the word, and probably it would not be difficult to secure sufficient evidence to justify prosecution, even though but little would be gained in the end by such action. However, it is a retaliatory measure that might be used with some effect if the druggists persist in their efforts to compel physicians to write prescriptions for every dose of medicine that is prescribed for their patients.

FOR many years *Succus Cineraria Maritima* has been advertised by an enterprising manufacturing concern as being a cure for cataract. The preparation has been sold at a fabulous price, and unfortunately not only have many sufferers from cataract been deluded by the specious pleas of the manufacturers, but not a few members of the medical profession also have believed the recommendations of the manufacturers and prescribed the remedy. A few years ago THE JOURNAL commented on this subject and pronounced *Succus Cineraria Maritima* a fraud, and we now are pleased to report that not only has the Council on Pharmacy and Chemistry of the A. M. A. reported that the claims made for *Succus Cineraria Maritima* are unfounded, but the Federal Government has sustained the report by announcing that the claim that "by dropping this preparation in the eye, cataract may be cured," is false and fraudulent.

As rapidly as possible the Executive Secretary of the Association is visiting county medical societies and making the acquaintance of

medical men all over the state. He has a splendid talk on the business affairs of the regular medical profession, and he hands out some hot shots concerning the shortcomings of medical men, but nothing he has to say is more pointed than it should be. We are a bunch of brainless idiots when it comes to anything but scientific medicine. For the most part, our medical organizations are in a state of utter demoralization so far as the good they accomplish for the economic advancement of the doctor. Our Executive Secretary has adopted some plans which will change all this, and he asks the cooperation of every member of our Association in bringing about the desired results. Therefore, if he asks for a meeting of your county medical society, give it to him, and see that every member of your society is present—even if the sheriff has to compel attendance.

A NEW magazine which promises to be of the utmost value to the medical profession is the *American Journal of Syphilis*, published by the Mosby Company of St. Louis, and edited by Drs. Loyd Thompson and W. A. Deaderick of Hot Springs, Ark. The first number is exceedingly good looking mechanically, and contains some of the most important and timely material bearing on this disease which is demanding the attention of the medical profession as never before, and which will continue to demand more efficient attention in the future. All departments of syphilography are represented under the following department heads: Parasitology, Pathology, Therapy, Dermatology, Neurology, Ophthalmology, Serology, Urology, Internal Medicine, Gynecology and Obstetrics, Social, Surgical, and Roentgenological Aspects of Syphilis. The value of such a publication is without question, and we prophesy success for the undertaking if the *Journal* is carried out along the lines of its initial issue.

IT strikes us as inconsistent, though at the same time amusing, to hear osteopaths and chiropractors say in one minute that they treat and cure all diseases by manipulation, when the next minute they advocate laws permitting them to practice major surgery and to prescribe drugs if in their judgment such should be needed. Not a few osteopaths and chiropractors have asked for the privilege of dispensing narcotics under the Harrison Anti-Narcotic Law, and it is a well-known fact that many members of these cults are quietly prescribing drugs to assist them in accomplishing results which they glibly claim are brought about through manipulation.

Again, let us put the query, why do we put forth so much effort to secure legislation covering requirements for the practice of medicine and then do little or nothing to enforce the laws placed on our statute books? What is the use of having any medical laws if any person, not even possessing the rudiments of a medical education, is permitted to practice medicine?

THE Michigan State Medical Society has up for consideration as a new feature for the society, the group plan life insurance, whereby it will be possible for members who have been rejected because of physical defects to secure a \$3,000 policy at rates lower than those quoted to single individuals; it will permit others to obtain additional insurance at greatly reduced rates; and makes it possible for those of limited financial means to secure added protection without incurring large premium obligations. The plan in brief is to cause to be available to the members of the society life insurance to the amount of \$1,000 to \$3,000 at an annual rate of from \$6.66 to \$46.13 per \$1,000, between the ages of 35 to 65 years, *without* physical examination. The policy also to contain a total permanent disability feature. The plan is bona fide, emanating from financially sound insurance corporations, and if adopted by the Michigan State Society will mean increased value of membership in that organization. The editor of THE JOURNAL is investigating the matter with a view of having the proposition put before the members of the Indiana State Medical Association.

Now that the Indiana legislature has adjourned and there is no occasion for worrying our fool heads off over pending mischievous legislation, we can turn our attention to organization affairs and the purely professional side of the practice of medicine. During the past ninety days our Executive Secretary has been untiring in his efforts to look after legislative affairs as they pertain to the medical profession, and he will be just as untiring and efficient in now taking up other interests. He will have his hands full in endeavors not only to increase the membership in the various county medical societies, but in instilling more active interest and enthusiasm in the work of those societies. He also will have much to do in straightening out some of the kinks that exist in connection with medical men in their relation to our compensation law, medical examinations for life insurance companies and some other live topics. The office should be a clearing house for the troubles of the medical profession of Indiana.

It is a little amusing to read in the annual report of the clerk of the Christian Science Mother Church the following:

"The present turmoil of the world's conflicting forces has given special opportunity for the ministry of Christian Science to prove its faith by its works. In those countries fatally affected by the war unusual opportunities are constantly presenting themselves for the practical demonstration of Christian Science, both in the healing of sickness and sorrow and through the relief of suffering by contributions from the War Relief Fund of the Mother Church."

We grant that the opportunity exists for demonstrating the practical value of Christian Science healing, but we do not hear of any results, and it is not likely that we shall hear of any. Christian Science is the most irrational delusion of modern times. It never has and never will accomplish anything worth while in the relief of real sickness or injury. In the European battle fields, where there is an urgent demand for the relief afforded by skilled medical and surgical attention, the Christian Scientist is of about as much use as would be popguns in carrying on modern warfare.

THE *Journal of the A. M. A.* of March 31, 1917, calls attention to the fallacy of internal vaccination against smallpox, and states that the result of the experiment reported by Garrison proved the utter failure of this method—of twenty-five persons given vaccinum by mouth, twenty were subsequently proved to be unprotected, as they were vaccinated successfully by the ordinary scarification method. This was a foregone conclusion because medical science and experience knows of no other successful and practical way of inducing the changes in the body which result in protection against infection, than by introducing the vaccine material directly into the tissues or the blood. This is true of all forms of protective inoculation—inoculation against typhoid, against cholera, against plague, etc., as well as against smallpox. The simple reason for this universal practice of introducing the vaccine material directly into the tissues is that when introduced into the stomach in health, the material is broken up and digested and deprived of its specific properties before it is absorbed.

A VIGOROUS campaign is on to enlist the aid of every adult in this country in the support of our National Red Cross Organization. There can be no argument about the necessity for every one joining and doing all he or she can in its support, and it is the duty of physicians to use their influence to the utmost in encourag-

ing their communities to do so. Never before in the history of the world, so far as we know, has there been so great a need for material aid to so many sufferers as there is at present. Not only that, but it really seems that as time goes on the demand for aid such as our Red Cross can give increases more and more. Furthermore, our Red Cross must be prepared to carry on its activity in this country to the best advantage should we be forced into a declaration of war. To be thoroughly prepared and to take care of all present urgent needs, the organization needs money and supplies. The money must be furnished by the American people. That is all the Red Cross asks of the American people. The latter will not be required nor will they be called on to do any sort of field work. Their support—not only their moral, but their financial support—is wanted. No real American dare deny his or her support. Let every one join the Red Cross, let every one boost it, and let every one give it his or her whole-hearted encouragement and support!

WORD has been received concerning the death of Dr. Emil Adolph von Behring, on April 1, at Marburg, Germany, following an illness of several months. Dr. Behring's discovery of diphtheria antitoxin overshadowed his other work, but among the more recent of his scientific work are his improved antitetanus serum and his method of computing the total amount of blood. He was trained as an army medical man, and served as such until appointed assistant at the Hygienic Institute and later at the Institute for Infectious Diseases. In 1894 he was called to the chair of hygiene at Halle, and the year later to the Institute for Hygiene and Experimental Therapy at Marburg, where he has since resided. At the first distribution of the Nobel prizes (1901), he was awarded the prize for the greatest discovery in medicine; and he also was the recipient of a prize of \$5,000 from the Paris Academie de medicine, and another of \$10,000 from the French Academie des sciences. His work with Dr. Paul Ehrlich (who was born on March 14, 1854, or one day preceding the birth of Behring), led them to be called "twin sons of science and humanity." Dr. Ehrlich died August 20, 1915.

THE March number of THE JOURNAL contained a news note which read as follows:

The Ross Chiropractic College of Fort Wayne is defendant in a \$10,000 damage suit brought against it by Jennie Liebrez, widow of the late Fred Liebrez.

The complaint sets forth that the deceased had taken treatment from an inexperienced student and that an injury to the spine, resulting from the adjustment, caused the death.

The institution mentioned is under the control of B. H. Ross, who is said to have been driven from Grand Rapids, where he attempted to conduct a chiropractic school. He is not licensed to practice medicine in Indiana, but is able to defy the law and not only practice for private gain, but is instrumental in turning on an unsuspecting public a lot of chiropractic graduates (?) who, after a few weeks or months of study and the payment of considerable fees to the Ross Chiropractic College, go forth to delude and impose on the public in the same manner as their instructor. So far as the death, said to be due to the unskilful adjustments by an inexperienced student, is concerned, we doubt if the so-called "adjustments" are any more injurious at the hands of a student than at the hands of a teacher. The point worth considering is the leniency granted these pretenders who, without education, training or experience in the diagnosis of disease, are permitted to tamper with human lives.

WHETHER our activity in the present European war is to continue long or not, it seems to be a settled fact that the United States is going to establish and maintain an army and navy larger than ever before in the history of the country. This means an avenue for the services of physicians, and the younger men in the profession in particular will be required for military duty, and probably will find such service satisfactory from every point of view. But it must not be supposed that the average doctor can jump into this military work and make a success of it, for such is not the case. Like everything else, military surgery and all of the duties that fall to the physician attached to our army and navy are far different than the duties of physicians in civil life. A great deal of training will be required to fit men for the service, and when once they are fitted for the service they should enter it and remain there. Therefore, there will be little occasion for the acceptance of services from the older men in the medical profession unless, perchance, such men as have seen medical service in the army or navy. It is to the young men that the country will look for its recruits—especially the men now in our medical colleges. There will be positions for several thousand of them, and the service will be made attractive from the standpoint of remuneration, chance for promotion and opportunities for varied experience.

THE high cost of living, to say nothing of the high cost of everything which is required as equipment for the practice of medicine, makes the average doctor think a little more about collecting his bills. As we often have said, there is no reason why the doctor should not adopt business principles and expect and demand prompt payment for professional services rendered. He will, however, meet with more opposition than usual, notwithstanding the fact that few of his patrons have failed to profit by the increased prosperity that has come directly or indirectly to the greater portion of the population as a result of the European conflict. And then, the present conditions seem to have increased the number of real "dead beats" or those who can pay but will not do so. We have no desire to make it really a hardship for any one to pay any bill, but there should be some legal means by which the "dead beat" can be forced to pay his just obligations in accordance with his ability to pay. The man who lives extravagantly, and does so through his ability to avoid paying for his extravagance, deserves no leniency nor charity. It is unfortunate that such men find it especially easy to beat the doctor, and some means should be adopted to limit his operations along that line. The "black list" is not a particularly desirable feature, and yet there is no reason why doctors, like merchants, should not rely on a credit rating book in extending credit.

THE *Journal of the A. M. A.* makes a plea for suspension of the patent on salvarsan and neosalvarsan so that our American manufacturers can supply us with similar products, or something that is even more efficient and less toxic in effect. The plea is not without justice in view of the shortage of the German products, but aside from all this, there is no reason why the United States government should permit the monopoly of drugs that are of such inestimable value in treating diseases. If patents are granted, they should be under greater limitations than at present, and suspended in times like the present when the supply from the patentees is entirely cut off but could be replenished through the efforts of our own manufacturers. At the time of the previous shortage of salvarsan and neosalvarsan, the Dermatologic Research Laboratory of Philadelphia manufactured a product under the name of "Arsenobenzol," which met with favor, and is reported by some as being superior to the original products. It is presumed—at least hoped—that in the present shortage the Philadelphia Laboratory again will manufacture the product. It should meet with

no legal difficulty, as the agents for the salvarsan and neosalvarsan manufacturers have intimated that they would not object to such supply of the product at times when they themselves were not able to furnish it. But, as *The Journal of the A. M. A.* says, such relief is not a permanent relief—it is a makeshift. Monopolies on some medicaments, such as diphtheria antitoxin, salvarsan and the like are against public interest.

ANENT the Executive Secretary's visit to the medical societies in the northern part of the state, the secretary of the Lake County Medical Society sends out a notice which is to the point and contains a meaning of its own. The letter is as follows:

Dear Doctor:

Wednesday, April 4th, 6:30 p. m., Gary Y. M. C. A., Dollar Dinner.

Now that bare announcement wouldn't draw twenty members, but when we tell you how important this meeting is, you will get there or bust a hame-string.

Frederick E. Schortemeier, executive secretary of the Indiana State Medical Association, will be here to give us the "double O," at that time, and incidentally tear the hide off and expose the frailty of organized medicine.

He has fought our fight in the recent legislature and comes to us ready to tell us what we must do to be saved.

Now, we know "Schort" pretty well, have seen him in action, under fire, and have heard him read and expound the law as applied to get up and do something, so when you hear him get going with all cylinders working, you will wonder why he isn't a senator or something.

He doesn't know much about Lake County medical affairs, except that he has seen the president and secretary, so his opinion isn't really worth while—yet. But we want him to leave here feeling that he has seen the biggest, liveliest bunch of fellows in Indiana.

Now in order that there will not be a mixup as to the details of the meeting, send your acceptance and dollar to Dr. E. E. Evans, 515 Broadway, Gary, not later than April 1st.

Let us all do this at once, and make a special effort to be present on time.

As Schortemeier says, "The medical profession of Indiana can have anything if they will but get together."

E. M. SHANKLIN, Secretary.

IN this number of *THE JOURNAL*, among the professional cards, will be found the announcement of an Indiana physician who limits his practice to anesthesia and anesthetic counsel. So far as we know, this is the first instance of an Indiana physician limiting his practice to anesthesia, though we long have wondered why some one did not take up anesthesia as an exclusive specialty. Now that some one has made a venture, we predict that there are others who, on receiving adequate training and having a

sufficient amount of experience, will follow suit. Nothing in the practice of medicine requires more good judgment based on experience and training than does the proper administration of an anesthetic, and there is nothing quite so disquieting to a surgeon as the knowledge that the patient on whom he is operating is in the hands of an untried or inexperienced anesthetist. And let us say now that we do not approve the practice of some physicians, and a few surgeons, which permits nurses to administer anesthetics. The one who gives an anesthetic should be a well-trained medical man, aside from having training and experience in the giving of anesthetics. Occasionally a nurse, possessing superior ability and good judgment, may give a large number of anesthetics very safely and very well; but in an emergency the knowledge and experience of a physician is demanded; and if the *exceptional* nurse is unable to cope with an emergency, what can be expected of the average or *ordinary* nurse?

AGAIN the time of year is approaching when the fly puts in his appearance to annoy and to menace health, and, again, we emphasize the importance of killing the early fly. In considering ways and means of ridding the homes and other buildings of this pest, we desire once more to call attention to the danger of fly poisons. The *Journal of the Michigan State Medical Society* published in its March number a table showing cases where children had been poisoned from arsenical fly destroyers reported in the press and collected through the agency of a press clipping bureau during the last year. It is interesting to note that nine of these cases occurred in Illinois, where a bill introduced in the legislature to prohibit the sale of poisonous fly papers was *defeated*; whereas but one case occurred in Michigan, where a similar bill was *passed* by the legislature. Illinois paid as tribute for the neglect of her legislators to safeguard children, three infant lives and the suffering of six others. This example is a forceful one, in our opinion, and is self-pleading for the abolition of this peril. The United States Public Health Service has taken cognizance of the dangers of poisonous fly papers, and has emphasized the matter in supplement No. 29 of the Public Health Reports. There seems to be no sufficient reason for permitting the unrestricted sale of arsenical fly destroyers, and it would be well if Indiana, as well as other states, followed the lead of Michigan and regulate their sale. The profession has a responsibility in this matter, and should exercise its educational influence to abolish this evil.

THE chiropractors failed in their effort to secure a separate examining board in Indiana, but that will not prevent them from practicing medicine in Indiana without much interference. Almost within the shadow of THE JOURNAL office there exists a chiropractic school, advertising a free clinic, as also advertising that chiropractic practice offers a sure and safe means of securing an income after but a limited period of study. That most, if not all, of the teachers in this chiropractic school are not registered in Indiana for the practice of medicine is well known, but they practice in defiance of laws, and probably will continue to do so. As one chiropractic has said, in commenting on the failure to secure a chiropractic board for Indiana: "A board would not alter conditions much except that it would legalize our work and save us from petty annoyances brought about by occasional attempted prosecutions by members of the regular medical profession, and occasional trouble in legally collecting fees for our services."

In passing it may be said that pseudomedical cults of every description could be prevented from plying their trades if the regular medical profession as a unit put forth an effort to uphold the medical laws on our statute books, and assisted in vigorously and unrelentingly prosecuting offenders. Laws we have, and they are sufficiently definite and protective in nature if enforced. All that is required is a little influence and effort to make those laws effective. They might just as well be wiped off the statute books as to be there and not enforced, and they never will be enforced until the regular medical profession makes an attempt to have them enforced. The public really expects us to make the first move. Will we do it?

THE American Society for the Control of Cancer is pushing a campaign to promote the familiarity of physicians, both students and practitioners, with the modern knowledge of cancer. The society holds that the professional organizations, particularly the state medical societies, should lead in this work, and a form letter, with the following suggestions, has been sent to the secretary of each state medical society: (1) That a standing committee on cancer be appointed; (2) that said committee be continued in office for at least three to five years; (3) that the chief function of such committee be the cancer education of the physician through the promotion of addresses and symposia on cancer at the state, district and county society meetings; the publication of the best obtainable

cancer articles in state journals; and the distribution of reprints and other literature; (4) that any action which seems to them appropriate in obtaining the extension of public facilities for tumor diagnosis within their jurisdiction, both as a means of assisting the physician to a prompt and certain determination of doubtful cases, and at the same time giving the patient the benefit of earlier and more promising treatment; (5) promote the special instruction of nurses, social workers and others coming in direct contact with patients, that suspicious symptoms be recognized early and referred to the physician for diagnosis and attention. Indiana physicians should be wide awake and up to the minute in furthering this work. A standing committee should be appointed in the State Association, plans outlined and the county societies and physicians individually should cooperate heartily in promoting this education which means so much toward the control of cancer mortality. The physician individually can assist by becoming a member of the society, dues to which are \$5 per year, or becoming a patron of the society at \$50 per year. Checks should be made payable to Howard Bayne, treasurer, and sent to the American Society for the Control of Cancer, 25 West Forty-Fifth Street, New York City.

THERE is a great deal of delusion concerning the beneficial effects of serums and vaccines. This is due essentially to three causes: First, the variation in the strength and potency of serums and vaccines as ordinarily prepared; second, the absence of methods for determining the potency of serums and vaccines; and third, the ignorance and carelessness on the part of a large percentage of the medical profession in determining the cases in which serum or vaccine treatment should be used, and the proper analysis of the results as a guide for further use of the treatment. Quite recently the Council on Pharmacy and Chemistry of the A. M. A. have made a new ruling concerning the dating of biologic products which will prove helpful to the physician, and, in a measure, safeguard the patient. The plan of manufacturers in fixing an expiration date beyond which serums or vaccines are supposed to be unreliable, is not thought to be a safe one to follow. The Council, therefore, advocates a stamp on each package, giving the date of its manufacture, thus enabling the physician to know the age of the given product when it reaches him, and he can use his own judgment regarding the potency as influenced by the length of time it has been on the market. It is unfortunate that there is not

some method whereby vaccines can be standardized, as it also is unfortunate that medical men as a class are not familiar with indications and contraindications for vaccine treatment. That vaccines are a valuable addition to our means of treating certain pathologic conditions is well known, but vaccine treatment, like any other kind of treatment, must be given with intelligence and a knowledge of all that makes for success or failure from the treatment. Too much confidence has been given the information furnished by manufacturers, and while we do not doubt that some of the manufacturers of biologic products are conservative in giving instructions concerning the indications and contraindications for vaccine treatment and the method of carrying it out, yet on the whole a great deal of literature put out by manufacturers of biologic products is grossly exaggerated and unscientific in conclusions. The physician who desires to become informed concerning vaccine therapy will do well to secure his information through sources other than the manufacturers. This is not a sweeping condemnation of the literature put out by all manufacturers of biologic products, for there are a few firms that deserve great credit for the very highly scientific manner in which all therapeutic problems are handled, and the conservatism with which they offer recommendations or advice; but the trouble is in separating the wheat from the chaff. However, our educational institutions and many individuals in the medical profession are furnishing information that is not tainted with the commercialism so patent in much of the literature sent out by manufacturers, and it is to our well-educated and well-trained clinicians that we must look for dependable deductions and conclusions.

DEATHS

JAMES A. BIGELOW, M.D., died at Elkhart April 2, aged 80 years.

MILES M. NEWMAN, M.D., aged 73, died March 26 at his home in Ossian.

ANDREW G. GORRELL, M.D., aged 77, died March 20 at his home in Ossian.

MARY BELLE BURGE, wife of Dr. Aaron Burge of Sweetser, died March 22.

WILLIAM L. LEISTER, M.D., aged 67, died March 4 at his home in Oakland City.

CHARLES L. THOMAS, M.D., aged 83 years, died March 4 at his home in Crawfordsville.

MAE HANSON WHITE, wife of Dr. H. J. White of Hammond, died March 17, aged 26 years.

GEORGIA ANNA DAVIS, wife of Dr. John C. Davis of Logansport, died March 6, aged 30 years.

JOHN R. PORTER, M.D., of Lebanon, died March 9 following a stroke of apoplexy, aged 69 years.

SARAH WARDLAW, aged 75, widow of Dr. James Wardlaw of Staunton, died March 22, at Brazil.

WILLIAM HAUSE, M.D., of Westport, retired, died March 21 at the age of 79 years. He was a veteran of the Civil War.

WILLIAM H. GILLUM, M.D., of Rockville, died March 29, aged 70 years. He was a member of the Indiana State Medical Association.

ANDREW JACKSON CARPER, M.D., aged 71, died March 19 at his office in Elkhart. Was a graduate of Fort Wayne Medical College, class of 1882.

EMANUEL H. GEBAUER, M.D., of Indianapolis, died March 8, aged 45 years. He graduated from Barnes's Medical College, St. Louis, in 1897, and has practiced in Indianapolis ever since that time.

CHARLES P. GOODRICH, M.D., of Elkhart, died March 14 of double pneumonia; aged 63 years. Dr. Goodrich practiced in Elkhart twenty-five years, specializing in diseases of the eye, ear, nose and throat. He was a member of the Indiana State Medical Association, the American Medical Association, Railway Surgeons' Association, and the Elkhart Academy of Medicine.

OWEN E. METZGER, M.D., of South Whitley, died March 12, at the Lutheran Hospital, Fort Wayne, following an operation for appendicitis. Dr. Metzger was 35 years of age, graduated from the Medical Department of the University of Michigan in 1908, practiced medicine in South Whitley since his graduation, and had been actively associated with medical affairs in the county and state medical association. He also was a fellow of the American Medical Association.

SAMUEL P. COLLINGS, M.D., former well-known Indianapolis physician and surgeon, died March 16 at his home in Hot Springs, Ark., aged 72 years. Dr. Collings was born at Rockville, Ind.; graduated from the Jefferson Medical College, Philadelphia, in 1870; practiced two years in Philadelphia; located at Indianapolis in 1872; and removed to Hot Springs in 1877 where he practiced continuously for the past forty years. He was a member of the Arkansas State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

GENERAL

DR. D. J. CUMMINGS, Medora, suffered a stroke of paralysis on March 17.

DR. AND MRS. JOEL WHITAKER, Indianapolis, are spending several weeks in Atlanta, Ga.

DR. W. W. HEWINS has been appointed medical examiner of the Evansville naval recruiting office.

DR. OTT CASEY, Terre Haute, was married February 17 to Miss Mellie Sturm of Silverwood, Ind.

DR. MARIE HASLEP, Indianapolis, announces the removal of her offices to Flat 1, 1815 College Avenue.

DR. FRANCIS C. ABBOTT of Philadelphia left recently for France for another term of service at the war front.

MORTON FORD, youngest son of Dr. and Mrs. O. P. M. Ford of Rising Sun, died March 11, from pneumonia.

DR. C. S. BAKER, formerly of Princeton, Ind., has removed to Evansville and taken a position on the staff of Physicians at the Walker Hospital.

DR. JAMES WILSON (Democrat) and Dr. Lawrence Jewett (Republican) have been nominated candidates for mayor for the city of Wabash.

DR. GEORGE E. REYNOLDS, Columbus, recently underwent an operation for the enucleation of an eye at the Bartholomew County Hospital.

DR. AND MRS. C. W. BURKET, Warsaw, celebrated their golden wedding anniversary with a reception on March 12.

DR. DAVID JOHNS, East Chicago, was married March 10 to Miss Helen Marie Hartley, Crown Point. They left immediately for a trip through the East.

DR. BERT O'BRIEN, formerly of Winchester and Coatsville, has located at Danville for the practice of medicine. He has offices in the Hendricks Block.

DR. O. W. RIDGEWAY, Indianapolis, has returned from a trip to Havana, Cuba, accompanied by his family, who have been spending the winter in Florida.

DR. WAVERLY BRETZ, who has practiced medicine at Memphis, Tenn., for several years, has located at Huntingburg, with offices in the First National Bank Building.

DR. B. M. EDLAVITCH, Fort Wayne, has recently received his commission as first lieutenant in the Medical Section of the Reserve Corps of the United States Army.

THE Victor Electric Corporation have established their Indiana sales office at 1333 Calhoun Street, Fort Wayne, in charge of their Indiana salesman, Mr. A. W. Zimmerman.

THE forty-third semi-annual meeting of the Northern Tri-State Medical Association convened in the auditorium of the Post Tavern Hotel at Battle Creek, Mich., April 10.

DR. E. GUSTAV ZINKE, Cincinnati, Professor of Obstetrics in the Ohio-Miami Medical College, gave an illustrated lecture before the Vanderburg County Medical Society on March 13.

THE Methodist Hospital at Indianapolis is in receipt of a memorial gift of \$1,500 from Mr. and Mrs. Verling Stanley of Lapel for their daughter, Varlena Stanley, who died Dec. 15, 1916.

THE JOURNAL is just in receipt of Christmas and New Year Greetings from Dr. Paul Martin, Indianapolis, now serving as surgeon in chief of the American Physicians' Relief Expedition in Austria.

DR. B. B. GRIFFITH, Vincennes, was married March 6 to Mrs. Flora K. Moore, widow of the late Dr. M. G. Moore. They spent several weeks in the South before returning to Vincennes.

DR. CHARLES G. BEALL, Fort Wayne, announces that after March 31 he will confine his practice to that of consultant in internal medicine, limiting his work to office and hospital work and consultations.

DR. JOHN H. OLIVER of Indianapolis has been appointed director of a military base hospital at Indianapolis, and the City Hospital has been designated as the institution at which the base hospital will be organized.

THE Rockefeller Institute for Medical Research, with its plant valued at \$15,000,000, and with its object the intensive study of diseases, will, on the conclusion of the war, establish schools and hospitals in China to cost at least \$1,000,000.

DRS. JOSEPH MAURER and W. H. Braunlin of Marion have formed a partnership for the practice of their specialty, diseases of the eye, ear, nose and throat. Their offices are located on the seventh floor of the Marion National Bank Building.

THE Jay County Medical Society held an open meeting early in March at which the lawyers, ministers and dentists of the county were guests. Drs. Walter E. Pennington and William H. Foreman, Indianapolis, were the principal speakers.

THE local Child's Welfare Association of Petersburg, under the management of Dr. Florence Sherman, a member of the National Child's Welfare Association, conducted a free clinic for the examination of children early in March.

THE following doctors have been appointed on the Pensioning Examining Board for Marshall County: president, Dr. R. C. Stephens, Plymouth; secretary, Dr. N. B. Aspinall, Plymouth; and treasurer, Dr. C. E. Nussbaum, Bremen.

THE women physicians of Indianapolis, meeting in annual Nu Sigma Phi Sorority banquet, on March 15, organized the Women Physicians' Republican Club. Regular meetings are to be held, at which speakers will address the club on political and economic questions.

THE first issue of a new quarterly magazine, *The American Journal of Syphilis*, published by the Mosby Company of St. Louis, has appeared. Drs. Loyd Thompson and W. A. Deaderick of Hot Springs, Ark., are the editors.

DRS. MARTIN H. FISCHER and Joseph Eichberg of the University of Cincinnati, and Dr. Ludwig Hektoen of the University of Chicago have been appointed Cutter lecturers on hygiene and preventive medicine at Harvard University.

THE Indianapolis Medical Society, at a recent meeting, adopted a resolution promising every physician who enlists in the Medical Reserve Corps of the army, navy or marine corps, to preserve his professional practice intact for the time he is in the service of his country.

THE Provident Hospital at Pennville, owned by Dr. Chas. E. Caylor, has published a Year Book for 1917, giving a report of the work of the hospital for 1916. It shows a total of 213 surgical operations, 17 medical cases, 42 obstetrical cases, 4,462 office calls, and 1,087 outside calls.

THE Rhode Island Medical Journal, for the purpose of reflecting medical opinion throughout the state, has established a department to be known as "Letters to the Editor" Department which will form a medium for the discussion of ideas of mutual interest and profit to the state profession.

THE forty-fourth annual National Conference of Charities and Correction will be held at Pittsburgh June 6 to 13, 1917. The program, just issued, presents many subjects for discussion that may be of special interest to medical men, as, for instance, various health questions and social insurance.

FRANCE has a new antinarcotic law of the most drastic character, regulating the sale and use of cocain, morphin, and similar narcotic drugs. Violation of the law is punishable with a fine of from 100 to 3,000 francs (\$20 to \$600), or imprisonment for from six days to two months, or both.

DR. THOMAS C. KENNEDY, Indianapolis, who has been giving special attention to the treatment of cancer, and in particular to the use of radium, with excellent results, has removed into more commodious quarters at 226-7-8-9 Hume-Mansur Building. His offices will be known as The Radium Laboratory.

THE midwinter annual meeting of the middle section of the American Laryngological, Rhinological and Otological Society was held at Columbus, Ohio, February 26. Dr. Daniel W. Layman, Indianapolis, presented a "Report of a Case of Acute Purulent Leptomeningitis of Otitic Origin" at this meeting.

DR. S. S. WASHBURN, for forty-three years one of the most active physicians of Lafayette and Tippecanoe counties, has retired from practice. Dr. Oliver E. Griest of Philadelphia, graduate of the Jefferson Medical College, has purchased Dr. Washburn's practice and office equipment and has taken charge.

THE week of April 22 to 28 has been set apart by the National Negro Business League as National Negro Health Week. The league has agreed to cooperate with the National Clean-up and Paint-up campaign bureau in an endeavor to better the living conditions of negroes throughout the United States.

THE Phi Chi Medical Fraternity held their annual banquet at the Claypool Hotel March 7. Dr. Alfred Henry acted as toastmaster, and Dr. Edmund D. Clark and Dr. Adolph Hume delivered addresses. Among the guests of the fraternity were thirty members of the teaching corps of the Indiana University School of Medicine.

THE latest news from Dr. Joseph Rilus Eastman is that he is on his way home and expects to arrive in this country on April 23. He has had charge of a military hospital in Vienna, and left there several weeks ago, but owing to war conditions he was detained in Norway several weeks.

IN accordance with the leprosy bill enacted by the legislature, steps have been taken to build a home in Gibson County on the grounds of the county farm for David S. Byers, the Indiana leper. The wife and daughter have elected to go with the husband and father, so a comfortable, convenient and sanitary home will be built to accommodate the three.

DR. EDWIN WALKER of Evansville has recovered from his recent illness and has returned to his practice. The Walker Hospital has purchased the entire block upon which its present building now stands, and will enlarge their quarters. Dr. Walker has enlarged the medical staff of the hospital and plans are under way to make the Walker Hospital one of the largest and most efficient in that part of Indiana.

DURING March the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official remedies:

Nonproprietary articles: Ferric Cacodylate.

H. K. Mulford Company: Iron Cacodylate Ampules, 0.03 gm., Mulford.

E. R. Squibb and Sons: Ampoules Iron Cacodylate, 0.03 gm., Squibb.

PORTLAND (Oregon) papers report the removal of Dr. J. Chris. O'Day from Portland to the Hawaiian Islands. Dr. O'Day formerly was an Indiana man, practicing at Montpelier, Ind.; removed to Oil City, Pa., about ten years ago, and later located at Portland, Ore. He will continue the practice of his profession in this new field. The medical profession of Portland tendered Dr. O'Day a number of social affairs before his leaving for Honolulu.

IT is reported that the regents of the University of Michigan, on February 23, adopted a resolution confirming the union with the University of the Detroit College of Medicine and Surgery. In accordance with the terms of the merger the college will turn over its charter, real estate, equipment and hospital privileges to the university, and a fund of one million dollars will be raised for the development by the University of a graduate school of medicine in Detroit.

DR. D. C. PETERS, who practiced in Greentown, Ind., for twenty years, sold out in November of last year, and since which time has been taking a postgraduate course in the Chicago Polyclinic, has relocated for the practice of medicine at Kokomo, Ind. About June 1 he will be joined by his son, Dr. Byron J. Peters, who, since graduation, has been taking training at the Methodist Hospital, Indianapolis. They will have offices in the College Building, opposite the Courtland Hotel.

THE annual conference of the National Association for the Study and Prevention of Tuberculosis will be held in Cincinnati, Ohio, May 9, 10 and 11. This conference has, with few exceptions, been held in Washington, D. C., and this is a special opportunity for Indiana physicians to attend its sessions at smaller cost than usual. In the four departments of this convention, the clinical, pathologic, sociologic and nursing, there will be many things of particular interest to the Indiana medical profession. Headquarters of the conference will be at the Hotel Sinton.

DR. C. R. REA, secretary of the city board of health of Muncie, and Dr. Herman Bowles, county health commissioner, are arranging for the adoption of a new scheme for the reporting of births in Delaware County, whereby boys or girls bringing the first information of a birth to the board of health will be given 25 cents in money and a button with the legend "1917-Muncie Births-1." A new badge will be given for the report of each additional birth, each badge numbered consecutively 1, 2, 3 and so on. It is believed that this plan will be the means of obtaining a complete registration of all births in Muncie.

THE Children's Bureau of the United States Department of Labor, stimulated by the success of Baby Week last year, are making plans for a bigger and better Baby Week for 1917. The bureau, in conjunction with the General Federation of Women's Clubs, has set the week beginning May 1 as the time most generally suited for the event, and urges that this week be adopted wherever local conditions permit. It is probable that the welfare work incident to the week will be extended to cover all children still at home with their mothers and will not be limited to the period of infancy as heretofore.

THE Department of Commerce, Bureau of Census, under the direction of Samuel L. Rogers, has prepared and published a very complete and detailed statistical report on "Mortality from Cancer and Other Malignant Tumors in the Registration Area of the United States." Heretofore this report has been gotten out in a very vague and indefinite form which would not allow of intelligent comparison with other reports, and at the suggestion of the American Society for the Control of Cancer the Bureau of Census has brought forth this highly important volume which assumes for the first time a position among those available for research.

WOLCOTT, Ind., a town of about 800 inhabitants, has three physicians, none of whom are able to enlist in the United States medical service because of physical unfitness. In view of these circumstances these three physicians have agreed to join their practices in such a way that one of their number, Dr. J. H. Ravenscroft, will be free to offer his services to take charge of the practice of any doctor who desires to enlist in army service. Dr. Ravenscroft requests THE JOURNAL to make this announcement, and to state that he will agree to take care of such a practice until the enlisting doctor shall return, providing none of the three Wolcott physicians shall die during that period.

DR. J. L. FREELAND, after twenty years' practice of medicine in Indianapolis, is removing to Rocky Ford, Colo., to take up his permanent residence and establish a practice. Under the advice of his physicians, Dr. Freeland's son, who is a graduate of the Indiana University School of Medicine, has decided to permanently locate in Colorado, and Dr. Freeland goes primarily to be with him. It is the intention to establish a partnership as soon as the complete recovery of the son occurs, which is confidently expected at an early date. During the years of his residence in Indianapolis, Dr. Freeland has made an enviable record both as a physician and citizen. He served a term as superintendent of the City Hospital and made a record of efficiency which entitles him to a standing as one of the best superintendents the hospital has had. Dr. Freeland has many friends in Indianapolis and surrounding territory, who wish for him in his new field the success to which he is entitled.

DR. D. A. BARTLEY, a graduate of Indiana University, class of 1914, is now in London serving as one of the medical officers in a military hospital. In a letter to Dr. Chas. B. Danruther of LaPorte he describes his trip across the Atlantic over the route followed by the ill-fated Titanic and Lusitania, and says that his vessel sailed the last few days with life-boats swung out, and on the last night everyone slept with clothes on, ready for instant action in case an unfriendly torpedo from a submarine should give trouble. In the hospital where he is serving he has six wards of Germans to look after. In the meningitis wards the English surgeons are using a drug called flavine which seems to act very well. Two c.c. of the drug incorporated in 20 c.c. of serum is used as a dose. Dr. Bartley comments on the absence of lights in London at night, owing to the fear of zeppelins, and it is surprising how the cabmen and others get about the streets when it is so dark. He gives his address as No. 9 Doneraile St., Fulham, London, S.W., England.

THE second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917, and will last about one week. Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania will recognize the certificate of the National Board, and favorable legislation is now pending in twelve of the remaining states. A successful applicant may enter the

Reserve Corps of either the army or navy without further profesional examination, if their examination papers are satisfactory to a board of examiners of these services. The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation. Application blanks and further information may be obtained from the secretary, Dr. J. S. Rodman, 2106 Walnut Street, Philadelphia.

THE American Red Cross officials have made the estimation that in case of war they could immediately mobilize the following force: twenty-six completely equipped army and navy base hospital units, with a total of 1,250 nurses and 549 nurses' aids; thirty-one partly complete navy detachments of twenty nurses each; 115 local emergency detachments. Corps of expert instructors in surgical dressings, totaling about 120. It was also estimated that the organization could put into the field 2,970 trained Red Cross nurses, and that if 30 per cent. of those to whom the Red Cross had given elementary training responded as nurses' aids the total nursing personnel would be about 5,000. With the customary assignment of ten patients to each nurse it would thus be possible for the Red Cross to take care of 50,000 sick and wounded at once.

THE first meat market for the sale of horse meat was opened recently in New York City. In order to prevent deception, the regulations provide that only horse meat may be sold in such establishments, and as further safeguard, the horses are slaughtered only under the supervision of veterinarians of the Department of Health and every precaution is observed. Concerning horse flesh as food, Dr. W. Horace W. Hoskins, dean of the New York State Veterinary College, has the following to say:

"I am much interested and quite approve of the action of your department in permitting the opening of establishments for the sale of horse meat.

"So clean an animal, so free from tuberculosis and many other serious lesions common to our flesh-producing animals, and the continually soaring high prices of animal foods, make it extremely desirable that opportunities be afforded to obtain cheaper meats.

"The long prejudice held by so many people against horse meat, I trust, will soon be eliminated."

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

In view of the efforts now being made on the part of President Oliver and Mr. Schortemeier, the executive secretary, to increase our membership, a review of the membership situation on April 1 will be of assistance in stimulating the county secretaries.

The following societies by virtue of having already equaled or eclipsed their last year's membership are eligible to what we will call "The One Hundred Percent Club." The figures indicate the memberships for 1916 and 1917 to date:

County	1916	1917
Lake	77	98
Pulaski	5	13
Tipton	15	23
Vigo	85	92
Whitley	16	20
Boone	18	22
Henry	35	38
Owen	10	13
Kosciusko	22	24
Benton	12	14
Harrison	5	6
Johnson	17	18
Montgomery	36	37
Washington	4	5
White	6	7
Elkhart	57	58
Franklin	7	8
Fulton	14	15
Howard	36	36
Perry	12	12
Pike	15	15
Rush	20	20
Scott	3	3
Sullivan	35	35
Switzerland	10	10
Jackson	23	23
Lagrange	19	19
Lawrence	24	24
Noble	30	30
Tippecanoe	58	58
Union	7	7
Warrick	13	13
Wells	25	25
Clinton	18	18

On April 1st the membership was 2,413, as compared to the total of last year, which was 2,585. Not in the spirit of criticism, as there may be conditions which unavoidably handicap the secretaries, but to stimulate increased efforts, the following list is printed showing the societies which are far behind their last year's record:

County	Loss, Per Cent.
Starke	100
Orange	41
Ripley	35
Clay	35
Parke-Vermilion	32
Crawford	28
Jasper-Newton	25
Allen	24
Adams	23
Decatur	23
Carroll	21

CHARLES N. COMBS, Secretary.

Following is the list of physicians whose dues in the Indiana State Medical Association became delinquent on March 1, 1917:

Delinquents, 1917

ADAMS COUNTY

L. L. Mattox, Geneva.
H. M. Aspy, Geneva.

ALLEN COUNTY

D. R. Benninghoff, Ft. Wayne.
J. Frank Dinnen, Ft. Wayne.
S. T. Henderson, Ft. Wayne.
M. H. Hostetler, Grabbill.
A. L. Kane, Ft. Wayne.
J. E. McArdle, Ft. Wayne.
J. D. Morgan, Ft. Wayne.
Edward Moser, Woodburn.
J. W. H. Ranke, Ft. Wayne.
H. E. Steinman, Monroeville.
E. H. Underwood, Ft. Wayne.

BARTHOLOMEW COUNTY

J. K. Hawes, Columbus.
G. E. Reynolds, Columbus.
S. M. Voris, Columbus.

BENTON COUNTY

Arthur LeSage, Fowler.

BLACKFORD COUNTY

F. I. J. Hachet, Hartford City.
Ella A. Hollis, Hartford City.

CARROLL COUNTY

C. E. Angell, Celphi.
A. J. Chittick, Burlington.
J. E. Kitchel, Lincoln, R.R.15.
F. C. Lacke, Oakley.

CASS COUNTY

J. F. Hatfield, Walton.
Robt. Hessler, Logansport.
D. R. Ivey, Royal Center.
L. L. Quick, New Waverly.
J. J. Stanton, Logansport.

CLARK COUNTY

F. M. Johnson, Utica.
E. N. Flynn.
H. H. Reeder, Jeffersonville.

CLAY COUNTY

M. A. Freed, Clay City.
Frederick Nussel, Brazil.
Wm. Palm, Harmony.
J. A. Rawley, Brazil.
P. H. Veach, Staunton.
L. L. Williams, Brazil.
M. H. Young, Harmony.

CLINTON COUNTY

A. G. Chittick, Frankfort.
I. C. Lambert, Colfax.
B. B. Thorpe, Michigantown.

CRAWFORD COUNTY

Peter Grant, Marengo.
C. D. Luckett, English.

DAVISS COUNTY

N. M. Arthur, Washington, R. D. No. 5

DECATUR COUNTY

W. R. Turner, St. Paul.

DEKALB COUNTY

J. D. Nusbaum, Indianapolis.
W. H. Nusbaum, Indianapolis.

DELAWARE COUNTY

N. D. Berry, Muncie.
Virgil Gordon, Blountsville.
D. M. Green, Muncie.
S. G. Jump, Selma.

DUBOIS COUNTY

J. F. Casper, Jasper.
L. B. W. Johnson, Ireland.
U. G. Kelso, Dubois.
E. E. Schrieffer, Ferdinand.

ELKHART COUNTY

A. S. Hollingsworth, Goshen.
J. O. Walter, Bristol.

FAYETTE COUNTY

E. Derbyshire, Kissimmee, Fla.
H. M. Lamberson, Colorado Springs, Colo.

FOUNTAIN-WARREN CO.

Geo. Rowland, Covington.

FULTON COUNTY

A. L. Bowman, Rochester.

GIBSON COUNTY

H. H. Alexander, Princeton.
C. F. Diefendorf, Grandview.
T. D. Lockhart, Owensville.
J. M. Williams, Owensville.

GRANT COUNTY

L. H. Conley, Gas City.
Geo. W. Davis, Marion.
E. O. Harold, Marion.
Geln D. Kimball, Marion.
P. H. Lucas, Jonesboro.
E. T. Stout, Upland.

GREENE COUNTY

C. E. Amerman, Linton.
S. P. Berns, Willow Hill, Ill.
T. A. Burkhardt, Jasonville.
L. C. Lukenbill, Marco.
J. B. Young, Worthington.

HAMILTON COUNTY

E. C. Loehr, Noblesville.
A. C. Newby, Sheridan.

HANCOCK COUNTY

W. H. Larrabee, New Palestine.

HENDRICKS COUNTY

W. H. Harrison, Missoula, Mont.
J. D. Hendricks, Lizton.

HENRY COUNTY

W. M. Byers, Shirley.

HUNTINGTON COUNTY

W. R. Beck, Huntington.
E. G. Sprowl, Warren.
R. J. Sprowl, Warren.
G. G. Wimmer, Mt. Etna.

JACKSON COUNTY

E. G. Kyte, Shelbyville.

JASPER-NEWTON COUNTY

H. S. Hewitt, DeMotte.
H. F. Leedom, Morocco.
E. N. Loy, Rensselaer.
J. T. Martin, Mt. Ayr.
J. W. Merry, Mt. Ayr.

JAY COUNTY

M. T. Jay, Portland.
Harriet Wiley, Portland.

JEFFERSON COUNTY

R. M. Funkhouser, Evansville.
C. P. Harwood, Brooksbury.
Robt. McKeand, Lexington.
R. H. Stenger, Scottsburg.

KNOX COUNTY

H. M. Hendrickson, Poplar Bluff, Mo.
L. F. Hulsman, Vincennes.
W. E. Kessinger, Bicknell.
E. R. Lescher, Mt. Carmel, Ill.
E. B. Loudin, Hazelton.

LAGRANGE COUNTY

Chas. Dryer, St. Louis, Mo.

LAKE COUNTY

F. P. Cox, Indiana Harbor.
F. P. Hitchcock, Gary.
H. G. Merz, Detroit, Mich.
O. H. Peterson, Lowell.
W. A. Weiser, Bourbon.

LAPORTE COUNTY

W. Eberhardt, Michigan City.
Robt. Henderson, Kingsbury.
J. N. Ledbetter, Michigan City.
E. D. Maddox, LaCrosse.
D. D. Oak, LaCrosse.
J. D. Price, Lafayette.

LAWRENCE COUNTY

N. E. Mattox, Bedford.

MADISON COUNTY

C. L. Armstrong, Anderson.
J. C. Armstrong, Anderson.
E. W. Chittenden, Anderson.
C. E. Diven, Anderson.
J. J. Gibson, Alexandria.
E. W. Longnecker, Lakeland, Mich.
N. H. Manring, Elwood.
H. C. Martindale, Pendleton.
S. C. Newlin, Anderson.
G. A. Whitledge, Anderson.

MARION COUNTY

A. L. Barnes, Southport.
B. A. Brown, Indianapolis.
Severance Burrage, Indianapolis.
A. E. Guedel, Indianapolis.
D. F. Lee, Indianapolis.
J. F. McCool, Indianapolis.
J. L. Masters, Indianapolis.
H. G. Morgan, Indianapolis.
J. E. Morrow, Indianapolis.
Henry Ostroff, Reno, Nev.
R. A. Poole, Indianapolis.
E. C. Reyer, Indianapolis.
O. W. Ridgeway, Indianapolis.
W. L. Royster, Indianapolis.
S. P. Scherer, Indianapolis.
A. J. Sheridan, Indianapolis.
M. J. Shiel, Indianapolis.
W. H. Sisson, Indianapolis.
E. V. Smith, Indianapolis.
A. L. Thurston, Indianapolis.
H. T. Wagner, Indianapolis.
A. C. Weaver, Indianapolis.
P. H. Weeks, Cartersburg.
Joel Whitaker, Indianapolis.
E. E. Wishard, Indianapolis.

MARSHALL COUNTY

F. H. Kelly, Argos.
S. C. Loring, Plymouth.
H. M. McCracken, Argos.
F. E. Radcliff, Bourbon.
W. C. Sarber, Argos.

MARTIN COUNTY

G. M. Freeman, Shoals.

MIAMI COUNTY

A. H. Kalbfleisch, Mercedes, Texas.
D. C. Ridenour, Peru.

MONROE COUNTY

R. A. Akin, Bloomington.
O. F. Rogers, Bloomington.
Frank Tourner, Bloomington.

MORGAN COUNTY

J. H. Maxwell, Martinsville.

NOBLE COUNTY

N. J. Shook, Kendallville.
Frank Broughton, Kendallville.

ORANGE COUNTY

F. D. Arthur, West Baden.
J. R. Dillinger, French Lick.
W. H. Patton, Orleans.
T. B. Ritter, Orleans.
H. W. Sloan, French Lick.
O. H. Stewart, Orleans.
W. S. Workman, Orleans.

OWEN COUNTY

J. T. Hazel, Freedom.

PARKE-VERMILION CO.

R. L. Dooley, Montezuma.
O. M. Keyes, Dana.
C. C. Morris, Rockville.
W. C. Myers, Dana.
R. E. Swope, Rockville.
C. S. White, Rosedale.

PIKE COUNTY

Clarence Abbott, Otwell.
G. L. Ireland, Winslow.

PORTER COUNTY

J. C. Carson, Valparaiso.
H. M. Evans, Valparaiso.

POSEY COUNTY

Carl Flucks, Cerry, Ark.
J. R. Ranes, Mt. Vernon.
Edwin Rinear, Mt. Vernon.

POTNAM COUNTY

U. A. Wright, Coatsville.

RANDOLPH COUNTY

H. W. Detrick, Union City.
C. A. Spittler, Saratoga.
J. M. Wallace, Ridgeville.

RIPLEY COUNTY

J. G. Cox, Holton.
E. D. Freeman, Osgood.
E. E. Heath, Napoleon.
C. E. Holton, Holton.
R. C. Townsend, Gibson, Ill.

RUSH COUNTY

Emerson Barnum, Manilla.

ST. JOSEPH COUNTY

B. M. Hutchinson, Mishawaka.
F. J. Powers, South Bend.
C. A. Warwick, Chicago, Ill.

SHELBY COUNTY

T. G. Green, Shelbyville.
J. W. Parrish, Shelbyville.
H. E. Phares, Shelbyville.

SPENCER COUNTY

C. H. Adye, Rockport.

STARKE COUNTY

J. R. Abner, Hamlet.
S. I. Brown, Knox.
J. L. Denaut, Hamlet.
Albert Fisher, No. Judson.
P. O. Englerth, No. Judson.
Harry Bell, Knox.
D. O. White, Knox.

STEBEN COUNTY

R. D. Denman, Helmer.
I. L. Dunkel, Fremont.
T. R. Whitmarsh, DeTour, Mich.

SULLIVAN COUNTY

A. J. Nellans, Shelburn.

TIPPECANOE COUNTY

R. V. Hannell, Lafayette.
Geo. Revis, Lafayette.

TIPTON COUNTY

A. W. Gifford, Tipton.

VANDERBURG COUNTY

L. B. Bitz, Evansville.
D. B. Cain.
W. R. Cleveland, Evansville.
E. M. Folsom, Evansville.
D. S. Goble, Evansville.
H. M. Gottman, Evansville.
P. Y. McCoy.
E. C. Mace, Evansville.
Minor Miller, Evansville.
W. J. Reavis, Evansville.
M. W. Rothrock, Evansville.
C. L. Seitz, Evansville.
G. W. Tepe, Evansville.
Jas. Thomas, Owensville.
G. M. Young, Evansville.

VIGO COUNTY

H. E. Dees, Bicknell.
J. R. Love, Terre Haute.
W. H. Roberts, Terre Haute.

WABASH COUNTY

C. H. King, Wabash.
E. A. Rogers, Somerset.
G. L. Shoemaker, No. Manchester.
U. G. Vance, Lafontaine.

WARRICK COUNTY

E. L. Youngblood, Minneapolis.

WASHINGTON COUNTY

Ernest Mead, Livonia.

WAYNE COUNTY

C. P. Colburn, Richmond.
W. T. Griffiths, Fountain City.

WHITE COUNTY

D. W. Stevenson, Akron, O.
James Wellen, Richmond.
W. O. Gossett, Brookston.

INDIANAPOLIS MEDICAL SOCIETY

Feb. 6, 1917

In the absence of the president the first vice president, Dr. M. N. Hadley, called the meeting to order. Minutes of previous meeting were read and approved. There being no business the program of the evening followed.

PROGRAM

Paper: Some Erythemata, Dr. F. C. Cregor.

Abstract.—The paper discusses erythemata which may result from the ingestion of drugs. Mentioning many of the drugs, with a description of the forms of lesions produced. Erythema multiforme with a description of the lesions most frequently met with in the different decades, their points of predilection together with a report of a few cases. Erythema nodosum, erythema induratum Bazin, attention was called to frequent mistakes in diagnosis, especially to mistakes as to differentiation from syphilis.

Paper: What Do You Know About Syphilis? Dr. H. K. Langdon.

Abstract.—The burden of the treatment of syphilis a few years ago rested chiefly with the patient. If he took his mercury and iodids long enough he might be cured. This state of affairs was excusable at that time because of the lack of knowledge of the fundamental facts regarding this disease. Physicians generally, do not realize their responsibility in the treatment of syphilis. Its control rests with the physician and with the society, but the initiative is ours. Treatment of the individual case is our own particular task. Each case is a separate problem and must be carefully studied. The routine treatment of all cases is not productive of satisfactory results. The first step when a patient presents for treatment is a correct diagnosis. This, in almost every case requires the aid of the laboratory. The typical Hunterian chancre is seldom seen and a dark field examination should be made of every sore, to make assurance doubly sure. Syphilis begins with the inoculation of the *Spirochaeta pallida* through an abrasion in skin or mucous membrane. Neisser has shown that the spirochete cannot enter an unbroken surface. Infection is surest in superficial abrasions. Deep injections do not infect. Spirochetes have a predilection for squamous epithelium but when they have entered, multiply slowly until acclimated, then speed rapidly, involving connective tissue, blood and lymph channels. The futility of excising a chancre is thus shown. Four to six weeks after infection the chancre appears. According to Pusey the first one or two weeks of the chancre before the Wassermann becomes positive constitute the golden opportunity in syphilis. The disease may be aborted by vigorous treatment. The secondaries, or the acute stage begins about the time the chancre disappears. The eruption in this stage varies in all degrees. Adenitis, especially epitrochlear and cervical, fever, malaise, arthritic pains, anemia and insomnia are frequently present. Wassermann most certain in this stage. In any case, if Wassermann is not what you expected, do not attribute it to the inefficiency of the test. If you would only learn to consider serologic reactions as symptoms it would simplify matters for you. A strong positive is

a pathognomonic symptom of syphilis. A weak positive, for diagnostic purposes, must be regarded as one of the suspicious or uncertain symptoms of the syphilitic syndrome. Tertiary, latent and congenital syphilis and syphilis of the nervous system are more difficult to diagnose and frequently require all the serobiologic tests. The haphazard careless treatment of syphilis is unfortunately very common. Syphilis is not cured until the last spirochete has been destroyed. Since we cannot tell when this occurs, it is necessary to overtreat the patient to be sure. Treatment of syphilis in all forms was discussed in detail showing precautions to be noted and contraindications for certain forms of treatment. The pathology, diagnosis and treatment of syphilis of the nervous system was also discussed.

It being the pleasure of the society Dr. C. K. Jones presented a case of syphilitic gummata of the arm.

DISCUSSION

DR. S. E. EARP: Dr. Langdon's paper is a censure on all who treat syphilis inefficiently. The serobiological laboratory is a necessity for the treatment of lues. Must be admitted that the large percentage of cases is not treated by the serobiologist but by the general man. The latter does not always keep abreast of the times concerning syphilis and consequently does not get the best results. The practitioner and the serobiologist must join hands. Salvarsan and mercury are the most important in treatment. Benzoate of mercury being the most readily soluble, is to be recommended above the other mercury salts.

DR. W. P. GARSHWILER: I agree in most particulars with Dr. Langdon's paper. The diagnosis of syphilis by the chancre is not absolute. A dark field or Wassermann examination is necessary. There are many atypical sores. After diagnosis the duty of the physician is to convince the patient that he has syphilis. Cooperation is a necessity. Treatment ought not to be started until there is a perfect understanding. The spinal fluid should be taken early. There is no need of stopping treatment for rest periods. Continue intensive treatment. A fixed positive reaction means syphilis.

DR. FRANK PAYTON: Dermatology has advanced apace. Rosenow had proved conclusively that erythema nodosum is due to a specific streptococcus. Dark field examination is the accurate method of diagnosing syphilis from the primary sore.

DR. F. F. HUTCHINS: Three points ought to be emphasized: (1) Some spirochetes are so virulent that no treatment seems to help. (2) Hygienic measures are of as much value in the care of syphilis as of tuberculosis. (3) Ventricular puncture is necessary in the treatment of paresis.

DR. A. E. STERNE: It is not quite true to say that neurologists think that the intraspinal treatments are not getting results. At least there ought to be some qualifying statements. In paresis results are not such as to approach the expected by those aside from neurologists. Neurologists feel that more direct treatment (injection into the subdural space) will give better results. Destroyed brain tissue, as is found in true paresis, cannot be restored. There is no hope of an ultimate cure. The time to make spinal punctures

is when patient has headaches. Headache is a sign of involvement of the nervous system. Intraspinal treatment ought to be given at this time.

DR. F. W. CREGOR: Syphilis is a tissue disease. Can we be satisfied with anything but a long, thorough course of treatment? The abortion of syphilis is perhaps questionable. The Vienna school, which I follow, has a certain course of treatments. In the beginning two or three salvarsans are given, followed by nine intramuscular injections of mercury at five day intervals and then the iodids for eight days followed by a complete rest. This constitutes one course. Seven such courses are given extending over a period of three years.

DR. W. B. KITCHEN: Many well recognized authorities are at variance concerning dosage, intervals and the use of mercury in the treatment of syphilis. Politzer of New York, for instance, says that patients should have a daily dose of salvarsan for four or five days followed immediately by mercury. The method of treating chancre with the high frequency or Roentgen-ray spark is supposedly on the theory that the spirochetes are thereby killed in situ. We may perhaps be overzealous in our intraspinal treatment. There is proof that the salvarsan content in the spinal fluid after an intravenous injection is the same as the salvarsan content in the blood at that time.

DR. ALFRED HENRY: I do not believe that every positive Wassermann reaction means syphilis. The presence of lipoids in cases of tuberculosis gives a positive Wassermann. I have seen thirty such cases. The Wassermann reaction will be positive in some cases of tuberculosis.

DR. JOHN R. THRASHER: A positive Wassermann reaction in tuberculosis means that syphilis is also present. It is doubtful whether there are salvarsan-fast organisms. Paresis cannot be reached by intraspinal treatment. We must treat cases of syphilis early, thus aborting the disease and thereby paresis.

DR. F. C. POTTER: At necropsy a man whose blood and spinal fluid showed a 4+ Wassermann reaction had a complete tuberculous solidification of one lung and brain and cord syphilis. A 4+ Wassermann in tuberculosis means syphilis is present. One cannot depend on a negative blood in suspected cases of syphilis of the central nervous system.

DR. H. K. LANGDON (in conclusion): It would be better to say that 30 instead of 80 per cent. of the cases give a positive in two weeks after the primary sore. Ventricular puncture for paresis is impracticable at the present time. The intraspinal treatment of paresis is not for effecting a cure but to give benefit by lengthening the times between relapses. No matter how typical the secondaries may be we cannot say definitely that the condition is syphilis. Provocative salvarsans frequently produce positive Wassermann reactions but not always. We cannot state positively that syphilis can be cured. Some cases cannot be cured. Reinfection following treatment indicates that the immunity has been removed and consequently a cure effected.

Meeting adjourned. Attendance 88.

L. H. MAXWELL, Secretary.

Hotel Washington, Indianapolis

Feb. 13, 1917

The meeting was called to order by Dr. M. N. Hadley in the absence of the president, Dr. T. B. Noble, with Dr. N. P. Graham acting as secretary. The minutes of the previous meeting were not read.

Dr. W. N. Wishard presented Senate Bill No. 154, introduced by Senator Beardsley. Dr. Wishard also presented the following resolution:

It Is Hereby Resolved, That the Indianapolis Medical Society is opposed to Senate Bill No. 154, introduced by Senator Beardsley, the same being a bill which would place restriction on physicians in the dispensing of medicine, and that this opposition is based on the following reasons:

1. No better medical supplies will be available under the new bill than may now be had.

2. Each package of drugs in a physician's office now, under the present law, has been subject to inspection in the two dozen or less laboratories where made. The proposal to authorize a second inspection after these same drugs have been scattered among 5,000 offices means an increased expense of administration and duplication of work without in any way securing more efficiency in enforcement of the drug laws.

3. It will increase to the public the cost of medical supplies.

4. Through the labeling requirement it will promote self drugging.

5. The requirement for labeling medicine given to a patient with the quantity of certain drugs in each fluidounce and with the percentage of alcohol will mean a deal of calculating and consume a great deal of time. The amount of alcohol in each ingredient must be learned and then the percentage in the mixture calculated.

6. Since the drugs are already subject to inspection at their source it is evident that the visit of the state inspectors to these 5,000 offices will be as much for the annoyance of the physicians as it will be for the inspection of the drugs; through this annoyance it is hoped to divert the handling of these drugs to the retail drug stores.

7. The bill is a part of a trade fight to compel the public to buy drugs from no other source than the retail drug store; being part of such a trade fight, it is not suitable or desirable for legislative action that may favor one side to the controversy without any benefit to the public.

8. The bill is not only a part of a trade fight but it is intended to pave the way for a bill to be introduced at the next session of the legislature to require physicians to write prescriptions for all drugs they administer and thereby to greatly increase the profits of retail trade at the expense of the unfortunate poor and of citizens generally, and also to add almost impossible difficulties in the ordinary conduct of their work to physicians, especially those practicing in small communities.

9. This bill purports to be an amendment to the pure food and drug law, but Dr. J. N. Hurty, secretary of the Indiana State board of Health, authorizes the statement that the State Board of Health was not consulted about it, is not in favor of it, and is not supporting it.

Resolved, In view of the foregoing and many other considerations, that the Senators and Representatives are hereby earnestly requested to vote against said bill and to use all honorable methods to secure its overwhelming defeat.

(Signed) THE INDIANAPOLIS MEDICAL SOCIETY.

Dr. W. N. Wishard made a motion that a copy of the resolution be sent to every member of the Senate and the House. This motion was passed, namely, that each member of the Senate and House be sent a copy of the resolution.

Dr. Barnes made a motion that every legitimate pharmaceutical house doing business in Indiana also be sent a copy of Bill No. 154. The motion was seconded and passed. Dr. Wishard will have a copy of the resolution made and the secretary will mail the same. Dr. Wishard, before coming to the meeting, ascertained that the State Board of Health was not consulted about the bill, is not in favor of it, and is not supporting it.

PROGRAM

Paper: Modern Attitude of the Surgeon in Diseases of the Biliary Tract, Dr. E. E. Padgett.

Paper: Chronic Constipation; Types, Etiology and Treatment, Dr. W. H. Foreman.

DISCUSSION

DR. DAVIS ROSS: Dr. Ross complimented both papers very highly. He says that Dr. Padgett has entered into the cause and means of infection, and thinks that the profession is correct, that diseases of the biliary passages fall into the hands of the surgeon, that medicine does very little. Back in the seventies Dr. Babcock advanced the theory that most infections of the biliary passages started in infancy or early adult life. Dr. Ross thinks that in diseases of the biliary passages, you should not delay in consulting a surgeon too long, as most of these cases fall into the hands of the surgeon later on. In deciding between cholecystectomy and cholecystostomy, many factors should be taken into consideration. The Mayos believe that when the mucous membrane of the gallbladder has not been destroyed, cholecystostomy should be preferred, as undoubtedly cholecystostomy is the much less serious operation. Dr. Ross thinks that cholecystectomy is much more serious than cholecystostomy, comparing it to the teaching of the late Dr. Marsee, who in his lectures told the students that in doing an amputation, the higher up on the thigh it was done, the more serious would be the consequences. Again, in infections of the biliary passages he does not believe that extensive surgery should be done, it being better for the patient to have two operations than one extensive operation.

Dr. Foreman's paper takes up a very interesting subject for both the internist and the surgeon. Dr. Ross says that he is not at all offended that he has given the surgeon very little time for the treatment of constipation, and thinks that most cases of constipation are due to habit, carelessness, or neglect. He thinks that in a great many cases of constipation, operated by the surgeon for the relief of stricture or adhesions, requires further medical treatment for the relief of constipation.

DR. J. A. MACDONALD: Dr. MacDonald compliments both papers but does not agree with Dr. Padgett as to the infrequency of malignancy of the bile passages. In every case of obstructive jaundice, as well as in obstructive jaundice with enlarged liver, your first thought should be of malignancy. He says

the literature on cholecystectomy and cholecystostomy is about equally divided. He rather favors cholecystectomy in some cases, owing to the fact that drainage being kept up over a long period of time, an active streptococcic infection is liable to follow.

Dr. Foreman's paper was so well presented that very little can be said. Eliminating all cases of chronic constipation, there would be very little left for the internist and man in general medicine. At times it is very difficult to differentiate between the spastic and atonic constipation, inasmuch as both are often found in the same case. These cases, on account of lack of elimination, finally lead to alimentary and general toxemia, followed by abdominal infections.

DR. H. O. PANTZER: Personally, I remove very few gallbladders, preferring the drainage operation. This attitude is also to be noted in the work of the Mayo Clinic, which, it seems, is doing away with the radical operation and showing a preference for cholecystostomy.

DR. LOUIS BURCKHARDT: Posture and habit are important factors in the prevention of constipation.

DR. E. E. PADGETT (in conclusion): Dr. Padgett does not see the advantage of cholecystostomy over cholecystectomy, especially where there is a stone remaining in the common duct.

Meeting adjourned. Attendance 52.

NATHAN P. GRAHAM, Acting Secretary.

Feb. 20, 1917

Meeting was called to order by President Dr. T. B. Noble. Minutes of previous meeting were read and approved. The applications of Drs. C. B. McCulloch, Scott Edwards and E. E. Hodgins were read for first time and ordered posted for thirty days. Dr. Wishard introduced the following resolution:

WHEREAS, There has been introduced into the Legislature a bill for an act to appropriate \$350,000 for the purpose of erecting a building for the use of the Indiana University School of Medicine for \$150,000 of which sum the state is to be reimbursed by the transfer of the medical school's property to the state for use other than that of a medical school, and

WHEREAS, Owing to the destruction of its buildings whereby the medical school is without a home and is forced to hold its sessions at various places throughout the city, the demand for a new building is immediately imperative, be it

Resolved, That the Indianapolis Medical Society comprising over three hundred physicians practicing in Marion County, unqualifiedly endorses this bill and urgently asks its enactment into a law, and that the secretary shall be instructed to place a copy of these resolutions on the desk of each member of the Legislature.

Dr. Wishard moved that the resolution be adopted. Seconded by Dr. T. B. Eastman and passed.

Dr. C. D. Humes moved that a committee be appointed to draft resolutions of sympathy to be sent to Dr. H. E. Koons on account of the accidental drowning of his two sons. Seconded and passed. Drs. Humes, T. B. Eastman and Sharp were appointed on the committee. The following resolution was formulated:

We, as representatives of the Marion County Medical Society, wish to express to you and other members of your family our profound sympathy for you in your great sorrow. As a body our society has voted you this tribute and has ordered it spread on our minutes.

CHARLES D. HUMES,
W. N. SHARP,
T. B. EASTMAN,
Committee.

The president announced the action taken by the physicians of Indianapolis in regard to the Red Cross work. The committee appointed to cooperate in this work was as follows: Drs. L. D. Carter, E. D. Clark, Thomas Eastman, F. W. Foxworthy, L. J. Freeland, W. E. George, Murray N. Hadley, Alfred Henry, Bernays Kennedy, Edgar F. Kiser, W. B. Kitchen, Dan Layman, O. G. Pfaff, Leslie Maxwell, Lafayette Page, John W. Sluss, F. B. Wynn, A. E. Sterne, O. N. Torian, J. V. Reed, Louis Burckhardt, C. P. Emerson and C. B. McCulloch.

PROGRAM

Case Report. Some Recent Cases of Steel in the Vitreous, Dr. W. N. Sharp.

Dr. Sharp reported six cases of steel in the vitreous successfully removed, 50 per cent. with 0.5 vision or better. Recommends Roentgen-ray examinations in every case. Prefers small magnet in majority of cases. Point of attraction depends on location of steel. Remove by shortest route.

Case Report: Undiagnosed Pathology During Labor, Dr. H. E. Gabe.

The presence of two uterine fibroids one in each horn of the uterus made the diagnosis difficult.

Case Report: An Unusual Puerperal Infection, Dr. C. R. Sowder and Dr. V. H. Moon.

The case of a woman six months pregnant who was finally aborted on account of a severe sepsis with recurring chills and temperatures ranging as high as 107. A blood culture by Dr. Moon showed the infection to be due to *Bacillus abortis*. Following the abortion all symptoms gradually subsided.

Case Report: Combined Cord Sclerosis, Dr. F. F. Hutchins.

A condition which seemed to be epidemic in a certain community with no apparent cause for the same.

DISCUSSION

DR. C. E. FERGUSON: Dr. Sowder's case was a very difficult one to diagnose. The important question was the matter of emptying the uterus. On account of the high temperature with its probable effect on the child and the kidneys abortion was done. Immediate amelioration of symptoms was noted. Pregnancy was in the sixth month. This shows the importance of prenatal study of cases.

DR. G. B. JACKSON: It would be interesting to know whether the child's blood showed the same infection as the mother. From the case history it would seem that this infection was due rather to the bacillus bovasepticus than the bacillus abortis, because there was no evident tendency to abort. Atrium of infection probably same as intestinal tuberculosis in children, namely, the intestinal system and then the lymph glands. In differentiating a tumor from the

fetal head, the former is made more prominent by uterine contractions while the latter is less noticeable.

DR. LOUIS BURCKHARDT: A number of cases of pregnancy were seen last spring in connection with which there was an infection of unknown origin. Impossible to trace. In cases with pyelitis, puerperal fever and typhoid fever the sensorium is very clear. Experience with electrargol last year was disappointing. Apparently no effect.

DR. W. F. HUGHES: In the removal of particles of steel from the eye I formerly used the medium sized magnet but found that many small pieces were not attracted unless the tip of the magnet was introduced. Since using the giant magnet the results have been much more satisfactory.

DR. F. C. POTTER: In many paretics one gets all the characteristics of a combined sclerosis. The same is true in lead poisoning, pernicious anemia, pellagra and senile cases.

Meeting adjourned. Attendance 75.

L. H. MAXWELL, Secretary.

BARTHOLOMEW COUNTY

Bartholomew County Medical Society met in regular order at St. Denis Hotel, Feb. 13, 1917, and gave a six o'clock dinner and smoker in honor of their guest Dr. C. F. Nue of Indianapolis, who furnished an excellent paper for the meeting; subject: Mental and Nervous Diseases, the Result of Hyperthyroidism and Exophthalmic Goiter. The paper was well received and brought out a free discussion. Dr. George T. McCoy acted as toastmaster, after which the society extended a vote of thanks to Dr. Nue. Adjourned to meet March 13.

JAMES W. BENHAM, Secretary.

ELKHART COUNTY

Meeting of Feb. 1, 1917

Call to order at 8 p. m., by Vice President Hoover in Elkhart Public Library.

Minutes of January meeting read and approved.

Applications for membership from Drs. Hagenbaugh and Kistner read by secretary.

Address: "Acute Pelvic Infections," Dr. Thomas J. Watkins, Chicago. As practitioners of gynecology, we have not kept pace with the newer doctrines of immunity. Kocher has said: "We must do new things or we ossify." No use to argue with a man with fixed opinions.

Formerly infections were supposed to be due entirely to local processes. A local infection soon becomes a general infection. Treatment consists chiefly in general treatment. An exudate is Nature's remedy. Exudate is largely accidental. Duration of disease has no relation to the presence or absence of exudate. Presence of pus in pelvis is signal to wait for operation till pus becomes sterile.

Treatment of acute and chronic pelvic infections very different and should be looked on as two different diseases. Chronic much more amenable to surgery than the acute. Use of vaccines in acute pelvic infections seems illogical.

A streptococcus serum may be of some use, though patient may recover in spite of remedy—not because of it. Nonspecific substances (proteins) have been coming into use. Jobling, Vaughan and others have done work to show that nonspecific substances may have some beneficial action. A physician, too energetic in his treatment, may injure body resistance more than help it.

Put patient out of doors and the amount of food and sleep are about doubled. Weir Mitchell, as a Civil War surgeon, observed that wounded soldiers with infections improved most rapidly when out of doors. In Austria, infections are treated by sun rays. Great value of sleep. In some very acute infections, leukocytosis may be stimulated by the intramuscular injection of whole blood. Only deterrent is the hemolyzing effect of foreign blood. Intravascular injection of glucose may be of some value.

Treatment of acute puerperal infection is almost entirely medical. Mortality is considerably lower since medical treatment is being used more and surgical less. We now almost never incise puerperal exudate. Exudate never gets smaller while patient has fever. When the white count becomes normal the exudate melts away.

Nonpuerperal cases almost always medical. Formerly when pus tubes were removed, fever ran two or three weeks, now on leaving them, fever lasts one, two and rarely three weeks. Fever following operations is almost always worse than fever during disease.

Surgical treatment consists of curettage, incision and drainage and excision of diseased organs. Infected placentas always come away spontaneously. Curettage is attended by danger. Bleeding from uterus controlled by blood clot in uterine sinuses. A uterine sinus is a fine place for germs to grow. When curetted these sinuses are sure to force out many septic thrombi. Compare infected uterus with infected sloughing hand. Only treatment of latter is to trim away dead tissue. A rough operation to empty a uterus. To catch hold with placental forceps is using force. A bad thing handed down by tradition. A curettage is usually done by the misguided operator in a nonpuerperal case to prevent extension of infection to the tubes; *au contraire*, it causes extension to the tubes. Should not drain abscess in acute case unless it is superficial. Even then it should be done under local anesthesia or light gas. Keeping patient in proper mental state is extremely valuable. Degenerating or suppurating fibroids demand immediate excision. Twisted tumors with necrotic changes, immediate operation. Also appendicitis complicating pelvic infection.

Infected wounds after operation never take out sutures, do not open, probe or insert drainage. Moist hot boric dressings prevent discharges from desiccating and serum from coagulating. Has seen an infection drain entirely through hole of retention suture. Cited example of meddlesome treatment of infected wound.

DISCUSSION

Dr. G. B. Hoopingarner, Elkhart: What Watson, in 1840, said about infectious diseases was right. Joseph Price once said that the cemeteries held many monuments to cases operated in acute stage of pelvic infection. Dr. Hoopingarner is strongly in favor of medical treatment of acute pelvic infection.

Dr. J. A. Work, Jr., Elkhart, asked Dr. Watkins his opinion of Coffey's Quarantine Pack. Cited case of left pelvic exudate following three weeks after curettage of endometrium done by surgeon to relieve sterility.

Dr. S. O. Barwick, Elkhart, uses Seyler Tablet in uterus and vagina.

Dr. C. F. Fleming, Elkhart, asked concerning treatment of bleeding abortions and drainage after operation.

Dr. J. C. Fleming, Elkhart. Case occurred ten or twelve years ago. A prominent Goshen woman developed an infection four or five days after childbirth. Evidenced by a mass in right side of pelvis with high pulse and temperature. She improved for several days and then developed mass on left side. Then better again with temperature running along about 99 to 100 F., pulse 100. Seen by Dr. Fleming at this stage, who advised conservative medical treatment. Shortly afterward was seen by a New York surgeon who thought best to drain mass from below, which he did. Patient died third day thereafter. An abscess pointing in the vagina should be opened, especially in the third or fourth week after immunity has developed. Cases which run same low temperature for five or six weeks showing an exudate which does not resolve, it is good treatment to open.

Dr. S. L. Miller, Elkhart, inquires proper treatment in hemorrhage during abortion.

Dr. W. B. Christophel, Mishawaka. His rule: Empty uterus, then no interference. Later no interference.

Dr. P. B. Work, Elkhart. While he was intern in St. Luke's Hospital, Dr. Work noted that Dr. Watkins' results were best of any man on the staff. He ascribes this fact to Dr. Watkins' conservatism. Purely a case of bacteriology as to whether a tube should be operated same as an appendix. Extremely rare to have a colon bacillus or an allied infection in a tube.

Dr. W. A. Stauffer, Elkhart, cited three cases: (1) Pelvic infection with mass pointing into vagina; (2 and 3) gonorrheal infection with high temperature, also pointing in vagina. All three showed no pus on incising but made prompt recovery and have been well ever since.

Dr. B. F. Kuhn, Elkhart, cited case of infected uterus with retained secundae. Removal latter after eleven days and patient made a speedy recovery.

Dr. Thomas J. Watkins, closing. Watson and Alonzo Clark were close observers and great clinicians. Now we see the reason for treatment they advised. Logical indications for interference in chronic pus tube: (1) Acute suffering; (2) repeated attacks of salpingitis. Most cases sent in to hospital have been curetted and became worse after curettage. Be careful what you do as long as patient is getting better and do very little as long as patient is getting better. It often requires a great deal of courage to follow your convictions with the family and family physician clamoring to have something done. Comparison between infected appendix and infected tube. Case not infected, clean out uterus. Case infected, pack uterus and let it empty itself. Raise head of bed 12 inches, stiff mattress, as high as pos-

sible without discommoding patient. Puerperal cases nearly always show multiple abscesses and when they are incised only a part of infected tract is drained. Put five or six week cases out of doors and increase nutrition.

Safe rule, infected uterus empties itself. Unheard of for woman to die of retained placenta. Other pathogenic bacteria do not grow well when saprophytes are present. Old practitioners have often said they were never afraid of a case dying whose lochial discharge smelled badly.

Adjourned. JAMES A. WORK, JR., Secretary.

Meeting of March 1

Call to order at 8:30 by the secretary in Goshen Public Library.

Dr. D. L. Miller elected temporary chairman. Reading of minutes was suspended.

Drs. E. J. Hagenbaugh and J. W. Kistner were elected to membership by unanimous vote. A large number of dentists, guests of the society, were present.

Address: "The Relation of Dental Conditions to Systematic Disease," Dr. Carl D. Lucas, Indianapolis.

The interdependence of the dental and medical professions is becoming more and more apparent. Dentist controls the gateway to the oral and nasal cavities. The same as other body tissues, teeth are supplied with lymphatics, blood vessels and nerves. Germs in diseased teeth may and do show a selective affinity for tissues in remote parts of the body.

The internist in searching for the focus of infection in any given case, must first exclude the oral cavity as the source. The internist is prone to rely too much on his own opinion of the condition of the teeth. A dentist would hesitate to attempt a diagnosis of any internal disease. Difference between good and bad dentistry delineated. Anatomy and physiology of teeth reviewed. Dr. Lucas then showed a large series of lantern slides which covered every form of dental disease and differentiated good from bad dentistry.

DISCUSSION

J. W. Stage, D.D.S., Goshen. Devitalized tooth is not a foreign body. In pyorrhea, apparently arrested, the exposure of necks of teeth is often unbearable to patient. It is often necessary to devitalize teeth exposed by recession of gums. New developments and discoveries responsible for awakening in the important relation of dentistry to the medical profession. Dental profession is now supporting five or six research laboratories in the United States. Free public clinics are being established. Paid dental inspector should be provided by state law.

G. E. Harter, D.D.S., Elkhart, believes everything Dr. Lucas said. Medical and dental profession must cooperate in ferreting out and curing disease.

P. B. Work, M.D., Elkhart. A new field in dental surgery has been opened up. Obscure infection can be traced to teeth as well as to other foci. A big consideration in dentistry is the matter of getting a sufficient fee for good work which takes time. Workingmen's Health Insurance may help. Physician does harm in expressing an opinion as to a patient's teeth.

S. C. Wagner, M.D., Wakarusa, sees the great necessity for the dental and medical professions to "get together."

C. W. Haywood, M.D., Elkhart, wonders how many insane cases are due to wrong impressions carried to Gasserian ganglion. Took roentgenogram for dentist recently—film showed four unerupted molars. Should use every diagnostic aid in routine practice.

G. W. Spohn, M.D., Elkhart. Look at what the national and state dental associations are doing. Bad cases of squint corrected by repair of teeth. Asked Dr. Lucas to answer the following questions: (1) What percentage of patients coming to dental office show properly filled tooth cavities? (2) More systemic infections where dentists have worked or where they have not worked? (3) How far can we be guided by pain, as key to disease of teeth? (4) What percentage of cases where all the teeth have been extracted and are wearing plates, are free from disease? (5) Would you advise every dentist to have a Roentgen-ray apparatus?

Carl D. Lucas, M.D., closing. In case of sensitive root desiccate tooth and burnish it instead of devitalizing. Mentioned Forsyth Dental Clinic, Boston, one million dollar endowment, for poor children; one free clinic in Indianapolis at College of Oral Surgery, and Eastman free clinic at Rochester, N. Y. Dentist and physician must not think of fee till after work is finished. Dentists should always examine tonsils as a routine.

Dentists are making very rapid strides. Place of demarcation between dental, oral surgery and surgery belonging to the medical profession is the maxillary sinus. If infection comes into maxillary sinus from tooth lesion, treatment of the sinus condition comes under care of dentist. Doctors and dentists are now working hand in hand.

There are many cases of impacted teeth which are not the cause of nervous disturbance and insanity.

From 12 to 20 years of age is age for epileptic seizures to begin. Reported several cases of epilepsy in which impacted teeth were discovered and extracted with recovery. Four cases of iritis absolutely relieved by removing infection at roots of teeth. Rosin, chloroform and gutta percha are best fillings for pulp cavities. Only about 15 per cent. of root canals in the past has been properly filled. Now 98 per cent. is properly done when checked up by the Roentgen ray. Every dentist should have advantage of the Roentgen ray to diagnose the tooth disease and then to check up his work afterward. Pain is not always a criterion indicating disease of teeth. There can be a blind abscess with no pain.

Adjourned. JAMES A. WORK, JR., Secretary.

HUNTINGTON COUNTY

The Huntington County Medical Society met in Commercial Club rooms, Huntington, Wednesday evening, March 7, 1917, at 8 p. m. Roll call showed fourteen members present.

The paper for the evening was read by Dr. Hugo Brabyan on "Secondary Distal Infections."

Abstract: The importance of the etiological rela-

tionship of primarily local infection in throat, nose, accessory sinus and around teeth to more general disease has commanded our attention for many years but it is only recently that this association between cause and effect has been put on anything like an exact scientific basis. It is only recently that facts have been proven and rules laid down concerning transmission of infection from one point to another in the body, and particularly and most important, those explaining why certain infections are prone to attack certain organs and structures. Since this knowledge is of late origin our discussion will consist in most part of a résumé of recent literature on the subject.

Rosenow has shown that bacteria isolated from some particular organ or type of tissue in which they have lived and multiplied for some time come

1. Isolated streptococci grown on culture for few hours and injected into vein of dog or rabbit.

2. Animals chloroformed twenty-four to forty-eight hours.

3. Postmortem at once.

4. Lesions studied aid of hand lens and microscopically.

5. Hemorrhage, exudation, infiltration, necrosis taken as signs of infection, and later proven by microscope.

6. Compare the percentage of specific involvement for each class injected, with the percentage in lower line of nonspecific injections.

Animals surviving infection and living for some time show very little mild infection elsewhere, with marked active involvement of organ in question. One

PERCENTAGE OF ANIMALS SHOWING LESIONS IN

Sources of Streptococci	Appendix	Ulcer	G. Bladder	Joints	Endocarditis	Muscles	Nerves	Spinal Cord
Appendicitis.....	68	1	1	29	21	12		
Gastric Ulcer.....	2	60	20	16	12	0		
Cholecystitis.....	0	15	80	17	10	7		
Rheumatic Fever.....	8	18	3	66	46	27		
Myositis.....	2	10	2	20	10	75		
Endocarditis.....	0	0	5	15	84	0		
Multiple Neuritis.....	11	5	5	22	5	27	79	
Anterior Poliomyelitis.....	0	0	3	8	0	14	19	78
Mixed Strains.....	5	9	11	27	14	12	12	4

to possess a special virulency for that particular location. We will confine ourselves in this paper to the streptococci family. This tendency to localize electively within a very limited range he has termed "Mono-tropism." He believes that different strains of streptococci produce toxins *not* identical and that each may have a special potency or virulency for some particular organ. He believes that these different types are transmutable one to another, that they vary through a wide range of virulency and that this relative virulency is one of the things that determines to a large extent just what form or type of disease will be manifested when entrance into the body takes place. The virulence is increased by animal passage. It is decreased by continued culture on artificial media. The raising of virulency of a given strain by repeated animal passage increases their range of activity. The lowering of it also increases this range to a less degree.

Rosenow records a summary of the results obtained from intravenous injection into animals of streptococci isolated from various pathological lesions in the human and has prepared a chart setting forth graphically the results obtained.

might say that the tropism was proven even more by degree of lesions than in percentage.

His table shows: Joint lesions most common. This coincides with clinical experience.

Erythema nodosum. High percentage joint, muscle, heart involvement, which agrees with Osler's clinical opinion that it and rheumatism have same causative agent. A few clinical and laboratory observations from other sources seem to bear out quite well these experimental results of Rosenow's investigations.

Isaac Abt of Chicago believes in relationship between chorea and rheumatism.

Dr. Helmholtz of Chicago had 54 per cent. of 138 cases of chorea showing tonsillitis, endocarditis or rheumatism.

In 1915 there occurred at Culver Military Academy eight cases of appendicitis in twelve days and only seven cases during the balance of the year. The epidemic of appendicitis was almost coincident with one of mumps.

Reo Smith of Los Angeles reports fourteen cases of arthritis deformans with ten cures by ileocolostomies and colectomies after removal in some cases of tonsils, teeth, etc. He contends that the ileum is primary foci in many cases.

Wetherill of Denver says: "Subacute and chronic arthritis are common, nephritis and cardiovascular changes are frequent while neuritis and 'myalgias' are the habitual and stereotyped rule in those women who come seeking relief from old pelvic infections."

Billings has found that the focus of a recently active acute lesion contains bacteria with elective affinity for a developing secondary location.

As to treatment we can say that those measures which have become well known in combating the origin of rheumatism should be applied more generally for other conditions. The list of conditions dependent on a bad tooth, tonsil or pus tube have simply been increased. We must not overlook the fact, however, that *too much should not be expected by simple eradication of first pus pocket located as there may be others either inaccessible or so small as to not be found.* "We must also come to realize that primary foci are more than mere points of entry of infection; that they also may supply environment suitable for acquiring affinity for other tissues."

Billings warns us that in our search for and relief of source of infection, that the rest, fresh air, good food, elimination must not be forgotten.

Discussion opened by Dr. E. T. Dippell.

Adjourned. F. B. MORGAN, Secretary.

LAKE COUNTY

The Lake County Medical Society met in regular session at the Gary Y. M. C. A., Thursday, April 4, with an attendance of thirty-five members and one visitor.

Dinner was served at 7 p. m., following which we were addressed by Mr. Frederick E. Schortemeier, executive secretary of the Indiana State Medical Association. Much interest was shown in his report of the work of his office, and the state association may accept more prompt and concerted support from Lake County as a result of Mr. Schortemeier's visit.

The secretary reported that our membership had reached the century mark, with assurance of a still greater increase later in the year.

The question of a medical reserve corps was informally discussed, the general impression prevailing that with the Medical Reserve, Naval Reserve, and Red Cross associations all asking practically the same things, effort should be made to combine the activities of the local society in order that we may not be topheavy with local committees. Mr. Schortemeier suggested that the state association would endeavor to work out a plan by which all these organizations might receive the active support of the component societies.

Adjourned. E. M. SHANKLIN, Secretary.

MADISON COUNTY

Madison County Medical Society met in Anderson, March 26, at 4 p. m.

The essayist was Dr. Charles Melvin Mix of Muncie, subject, "Prostate Hypertrophy."

Abstract: Just as women at some time in their lives have womb trouble, most men, after 50, have trouble caused by obstructing prostate. The general practitioner is well aware of large number of the cases. The patients generally accept their lot as inevitable and irremediable and fail to consult a physician until serious damage is done. We are handi-

capped by not seeing these cases early enough. Judd says it is not a hypertrophy but a tumor formation like fibroid uterus. First symptoms were described. In the second stage of disease the patient is not able to empty bladder and residual urine remains. Here the real trouble begins. When the physician gets his first call he is not prepared to catheterize aseptically and a cystitis results. When the bladder is distended it causes it to lose its muscular tone, have pain, tenesmus and water dribbles. If there is back pressure we have a dilated ureter and kidney. Cystitis often develops. When he begins to use the catheter he leaves all his hope behind—average life is two years. Reported a man 82 years old, in hospital, who had been catheterized for eighteen months, and at present urine was free from pus and bacteria. There are two methods of operation: Perineal, which has been the most popular and endorsed by Wishard and Young of Baltimore. W. J. Mayo defines a specialist as a surgeon who, taking an ordinary simple procedure, makes it so difficult no one can do it but himself without killing the patient. This applies to perineal. The new era began when they began the suprapubic operation. Now this operation is in hands of general surgeon. The objections to old operation are (1) shock from long operation, (2) hemorrhage, (3) infection. This operation can be done in ten minutes under novocain in conjunction with nitrous oxid or oxygen. The earlier the operation the better. Mortality is almost nil.

In conclusion, we have with us the victim of enlarged prostate that merits more attention from the general practitioner than the surgeon. He should be encouraged that with a small risk he can be relieved of his bladder trouble. The earlier the least danger. These cases, left to follow the natural history of the disease, find only suffering, invalidism and premature death. An unrelieved prostate leads to kidney degeneration, cystitis, pyelitis, distention of kidney, finally uremia and death. Many a death certificate signed "Bright's" should be "unrelieved prostate obstruction."

Adjourned.

SETH IRWIN, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

TABLETS SODIUM CHLORIDE AND CITRATE-SQUIBB (DR. MARTIN H. FISCHER).—Each tablet contains sodium chloride 1 Gm. and sodium citrate 2 Gm. E. R. Squibb and Sons, New York.

OPTOCHIN.—ETHYL-HYDROCUPREINE.—A synthetic alkaloid closely related to quinine. It has the antimalarial and anesthetic action of quinine, but toxic symptoms, such as tinnitus, deafness, amblyopia or amaurosis (retinitis) are more liable to occur than with quinine. Investigations indicate that the drug may be of value in the treatment of lobar pneumonia, when its safe dosage has been determined. Reports indicate that the drug is of decided value in the treatment of pneumococcal infection of the eye (ulcus corneae serpens). Optochin is insoluble in water, but may be used in 1 to 2 per cent. solution in a bland fatty oil or as an ointment. Merck and Co., New York.

OPTOCHIN HYDROCHLORIDE.—ETHYL-HYDROCUPREINE HYDROCHLORIDE.—The hydrochloride of optochin (see above). It has the therapeutic properties of optochin, but is soluble in water. For application to the eye and instillation into the conjunctival sac a freshly prepared 1 to 2 per cent. solution in water is used. Merck and Co., New York (*Jour. A. M. A.*, March 3, 1917, p. 713).

PROPAGANDA FOR REFORM

EFFECT OF OPIUM ALKALOIDS ON THE URETERS.—According to D. I. Macht morphin and the opium alkaloids having a similar constitution increase the contraction and produce a greater tonicity of the ureter, whereas papaverin and the opium alkaloids constituted similarly produce a slowing or total inhibition of the contraction and relaxation of the tonus. In opium and pantopon, which contains the total alkaloids of opium, the effect of the morphin group preponderates. Ureteral colic is due to spasmodic contractions of the ureter caused by the irritating calculus and hence the use of papaverin or opium is more rational than that of morphin. Furthermore, the slighter toxicity of papaverin, its tonus lowering power and its local analgesic properties suggest its local application in spasmodic conditions of the ureter (*Jour. A. M. A.*, March 3, 1917, p. 719).

DATING OF BIOLOGIC PRODUCTS.—For the protection of the consumer as well as the manufacturer, the Council on Pharmacy and Chemistry has adopted a rule requiring that serums and vaccines and similar products to be accepted for New and Nonofficial Remedies must bear on each package the date of its manufacture in addition to the date required by federal law. The practice now followed by manufacturers of placing on the containers of biologic products the date beyond which these agents are not to be regarded as dependable (though in accordance with the federal law) has not been satisfactory. Except for diphtheria and tetanus antitoxin, in general there are no methods for determining the potency of serums and vaccines. At the present time, for the same material, one manufacturer will fix an expiration date of four months, others one year or even eighteen months. Obviously this lack of uniformity is unfair to the manufacturer who endeavors to supply a product as fresh as is commercially practicable and it also may lead the physician to form a false opinion regarding the potency of certain biologic products. The new rule of the Council will enable the physician to know the age of a given product when it reaches him and will permit him to judge whether or not it has been kept unduly long. Moreover, it will prove not only helpful to the conscientious manufacturer and the physician but will also safeguard the patient (*Jour. A. M. A.*, March 3, 1917, p. 728).

ANOTHER SHORTAGE OF SALVARSAN.—The indications are that the supply of salvarsan and neosalvarsan in this country has again reached the point of exhaustion. Congress, which made our patent law, has the power to suspend the patent on any preparation that the patentee is unable to, or does not supply, when such suspension is in the interest of public health, and it should suspend the salvarsan patent. In the meantime it is to be hoped that the Dermatologic Research Laboratory of Philadelphia will again supply the product as it did during the previous salvarsan shortage (*Jour. A. M. A.*, March 10, 1917, p. 785).

ICHTHYTAR.—The Council on Pharmacy and Chemistry reports that Ichthytar was submitted by the Szel Import and Export Company with the claim that it was essentially similar to ichthyol in composition and superior to it in therapeutic properties. The statements that were submitted regarding its

composition made it impossible to determine whether or not it was similar to or identical with ichthyol. No evidence was furnished in regard to its therapeutic value. On the basis of the available information the Council held the claims regarding composition and therapeutic value unsubstantiated and ichthytar ineligible for New and Nonofficial Remedies (*Jour. A. M. A.*, March 10, 1917, p. 796).

SUCCUS CINERARIA MARITIMA.—In agreement with the report of the Council on Pharmacy and Chemistry holding the claims made for Succus Cineraria Maritima (Walker) unfounded, the federal government charged that the claim that by dropping this preparation into the eye cataract may be cured was false and fraudulent. In February, 1916, the Walker Pharmacal Company pleaded guilty. Since the government's prosecution, brought under the Food and Drugs Act, affects only the claims made on the trade-package of a preparation, the admittedly false claims were still made in circular letters sent to physicians as late as October, 1916 (*Jour. A. M. A.*, March 17, 1917, p. 864).

RHEUME OLUM.—The Council on Pharmacy and Chemistry reports that Rheume Olum (The Rheume-Olum Chemical Co., Seattle, Wash.) is said to be composed of camphor 7 per cent., chloral hydrate 7 per cent., menthol $2\frac{1}{2}$ per cent., methyl salicylate 25 per cent., oil caput 2½ per cent., oleoresin capsicum, lanolin, white wax, "qs." The Council found Rheume Olum unacceptable for New and Nonofficial Remedies because the amount of the potent oleoresin of capsicum was not declared, because unwarranted therapeutic claims were made, because the name was non-descriptive of its composition and therapeutically suggestive and because the fixed formula was considered irrational (*Jour. A. M. A.*, March 17, 1917, p. 865).

CONTROL OF INTESTINAL BACTERIA.—A recent investigation indicates that the direct feeding of bacterial cultures of lactic acid producing organisms had almost no influence on the intestinal flora. On the other hand the administration of milk sugar (lactose) brought about a marked change in the intestinal flora. It appears therefore that the beneficial action of milk cultures is dependent on the lactose and not on the bacteria which they contain (*Jour. A. M. A.*, March 24, 1917, p. 918).

THE SARGOL CASE.—The exploiters of Sargol, the get-fat-quick nostrum, were found guilty of fraud and were fined \$30,000 after promising that the business would be discontinued. Sargol was made by Parke, Davis and Co. at a price of 53 cents to 78 cents per thousand tablets. Sargol was stated to contain extract saw palmetto, calcium hypophosphite, sodium hypophosphite, potassium hypophosphite, lecithin, extract nux vomica. The trial is said to have cost the United States over \$100,000. Although the business was palpably fraudulent, although the claims made for the nostrum were palpably false, the defendants were able to employ physicians to go on the stand and swear that Sargol was a "flesh builder" and "bust developer" (*Jour. A. M. A.*, March 24, 1917, p. 927).

BETAINE HYDROCHLORIDE.—It contains 23.8 per cent. absolute hydrochloric acid and 8 grains corresponds to about 18 minims of diluted hydrochloric acid. In solution betaine hydrochlorid dissociates into hydrochloric acid, but it is not so efficient in aiding the action of pepsin as an equivalent amount of hydrochloric acid (*Jour. A. M. A.*, March 24, 1917, p. 931).

ACTIVE PRINCIPLE OF LEECHES.—The principle in the buccal secretion of the leech which prevents the clotting of blood is herudin, a deutero-albumose (*Jour. A. M. A.*, March 24, 1917, p. 931).



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—Vide, J. A. M. A., February 24th, 1917

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Parathyroids—
Powder and Tablets, 1-20 gr.
Pituitary, Anterior—
Powder and Tablets, 2 gr.
Pituitary, Posterior—
Powder and Tablets, 1-10 gr.

BOOK REVIEWS

NERVOUS AND MENTAL DISEASES. Volume X of the
Practical Medicine Series for 1916. Edited by Hugh
T. Patrick, M.D., Professor of Neurology in the
Chicago Polyclinic, Clinical Professor of Nervous
Diseases in Northwestern University Medical
School; and Peter Bassoe, M.D., Assistant Profes-
sor of Nervous and Mental Diseases, Rush Medi-
cal College; with the collaboration of Lewis J.
Pollock, M.D. Cloth, \$1.35; price of series of ten
volumes, \$10.00. The Year Book Publishers,
Chicago.

The progress made during the year in our knowl-
edge of the diseases of the nervous system and psy-
chiatry is presented in this volume briefly yet fully
enough to include practically everything of impor-
tance. Several minor errors, evidently overlooked in
the proof-reading, occur in this issue.

**AN INQUIRY INTO THE PRINCIPLES AND TREATMENT
OF BROKEN LIMBS.** A Philosophico-surgical Essay
with Surgical Notes. By William F. Fluhrer, M.D.,
Consulting Surgeon to Bellevue and Mount Sinai
Hospitals. Rebman Company, Publishers, New
York, 1917.

In this book the author has attempted to set forth
"impersonal proof" of the value of his ideas and
methods as to the treatment of broken limbs. He
has had considerable experience in this specialty and
has formulated original ideas that are of immense
practical value. The point he emphasizes that end-
results determine the value of a method must be well
taken, and he presents proof of the value of his
methods that seems to be convincing.

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The volume is one of very good quality. The illustrations are all good, the frontispiece being unusually good and of much historical value.

Surgeons and all those concerned with the treatment of broken limbs ought to welcome this book as one really worth having.

PROGRESSIVE MEDICINE. Vol. XX, No. 1, March 1, 1917. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College. Paper, \$6.00 per year. Lea & Febiger, Publishers, Philadelphia and New York.

This issue contains a review of surgery of the head and neck by Frazier; a review of surgery of the thorax, excluding diseases of the breast, by George P. Müller of Philadelphia; of the infectious diseases, by Ruhräh, as usual; of diseases of children, by Crandall; of rhinology, laryngology and otology, by Coates.

Those who are already familiar with this journal know its value. Those who are not ought to become acquainted with this publication without delay.

THE SURGICAL CLINICS OF CHICAGO. Volume 1, Number 1, February, 1917. With 83 illustrations. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

The publishers deserve to be congratulated as much on the appearance of this work as they were on the appearance of the Medical Clinics of Chicago. Their purpose in offering the profession these bi-monthly surgical clinics given by the most prominent and best known clinical surgeons of Chicago is most commendable. They have given the great mass of practitioners something that the latter really need. The demand for these surgical clinics ought to be tremendous.

In this initial volume are contained clinics by Bevan, Ochsner, E. Wylls Andrews, McArthur, Dean Lewis, Carl Beck, Kanavel, Eisendrath, Kellogg Speed, Plummer, Ryerson, Phemister, and these clinics include a very wide range of subjects. Such an array of names is enough to insure a series of surgical clinics of the utmost value.

FREUD'S THEORIES OF NEUROSES. By Dr. Edward Hitschmann (Vienna). Authorized Translation by Charles Rockwell Payne, M.D., Introduction by Ernest Jones, M.D., M.R.P.P. Cloth, \$2.00 net; postage 15 cents. Moffat, Yard & Company, Publishers, 116-120 West Thirty-Second Street, New York.

This book is intended for medical men, educators, and all those interested in the subject of psychoanalysis. It is intended to serve as an introduction to this new chapter of psychology and psychotherapy as well as an incentive to stimulate increased interest and study of Freud's works on this subject.

The manner in which the subject is presented indicates that the author is one of the foremost contemporaneous students of this new science. He has given in this book an introductory presentation of Freud's theories of the neuroses that is indeed splendid.

That a book dealing with this subject will not be appreciated by all practitioners cannot be doubted. A certain amount of knowledge, and more particularly, some real interest in the subject of psychoanalysis, is presupposed on the part of everyone who would care for a work of this sort. If the necessary education and interest are lacking the material in this volume will seem nothing more than a jumble of high-

sounding words; but to those who understand and are interested, this volume will be one of great interest and of very great value.

THE JOURNAL OF UROLOGY. Experimental, medical, surgical. Hugh Hampton Young, M.D., Editor. Volume 1, Number 1. February, 1917. Subscription price, \$5.00 net. Published by Williams and Wilkins Company, Baltimore, Md., U. S. A.

It seems that the time has come when almost each specialty must have its own journal. The specialty of urology has made and is making such striking progress in this country that a special journal of urology is unquestionably a real need. The idea in issuing this new journal is that it may become "the archives in the United States for papers dealing with the urinary tract and correlated subjects."

It has been planned along broad lines. All work relating to the urinary tract, whether it be the chemistry, biochemistry, physics, embryology, anatomy, physiology, pharmacology, bacteriology, or pathology of the urinary tract and of the many organs and functions with which it is closely related, is to be discussed here. Original contributions will be encouraged and stimulated.

This initial volume conveys a good idea of the scope of this new journal. It indicates that this promises to be one of the highest grade scientific medical journals published, not only in this country but in any other country. The editorial committee and the publishers deserve the highest praise for their efforts and congratulations for their success already assured by this initial volume.

The cover page announces that this new journal will be published monthly, and the prospectus sent with this issue announces that it will be published bi-monthly. We are, therefore, unable to inform our readers definitely as to that. It should be noted that subscription is by volume only and not by the year.

A MANUAL OF THERAPEUTIC EXERCISE AND MASSAGE. Designed for the use of Physicians, Students and Masseurs. By C. Herman Bucholz, M.D., Orthopedic Surgeon to Out-Patients, Director of the Medico-Mechanical and Hydrotherapeutic Department of the Massachusetts General Hospital; Assistant in Orthopedic Surgery, Harvard Medical School; Assistant in Physical Therapeutics, Harvard Graduate School of Medicine. Illustrated with 89 engravings. Cloth, \$3.25. Lea & Febiger, Philadelphia and New York, 1917.

Another of the subjects to which clinicians will have to pay more attention from now on is that of therapeutic exercise and massage. At present there is, indeed, considerable ignorance with reference to this subject on the part of a great many—perhaps the majority—of active practitioners.

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This book fills a real need. It ought to be taken up eagerly by the profession, and no doubt it will be. The volume is very attractive, the illustrations are very good, and it is all in all a book of unusual merit and quality. Both the author and the publisher have rendered the profession a distinct service in presenting such a book as this.

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OF THE

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ISSUED MONTHLY under Direction of the Council

VOLUME X
NUMBER 5

FORT WAYNE, IND., MAY 15, 1917

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CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
Why Belong to a Medical Society? George F. Keiper, M.D., Lafayette	181		The Need of Research Work in Our Medical Schools....	195	
Conservatism in Cesarean Section. J. W. Shafer, M.D., Lafayette	186		Medical Preparedness	195	
The Relation of Cows' Milk to Human Tuberculosis. Will Shimer, M.D., Indianapolis	193		Safeguarding Medical Practices of the Doctors Who Enlist	196	
			Conservation of Food	197	
			Group Insurance for Medical Men.....	198	
			Suppression of Unnecessary Noise in Hospitals.....	199	
			Doctors Defend Swindle	199	
			Garrulous Doctors' Wives	200	
			Editorial Notes	201	

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		MISCELLANEOUS	
	PAGE		PAGE
Indiana State Medical Association	214	Deaths	207
Indianapolis Medical Society	215	News Notes and Personals	208
Bartholomew County Medical Society	220	Therapeutic Notes	213
Madison County Medical Society	220	Correspondence	213
		The Truth about Medicines.....	221
		Book Reviews	222

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Evansville, September 26, 27 and 28, 1917

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ISSUED MONTHLY under Direction of the Council

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VOLUME X

FORT WAYNE, IND., MAY 15, 1917

NUMBER 5

ORIGINAL ARTICLES

WHY BELONG TO A MEDICAL SOCIETY?

GEORGE F. KEIPER, M.D.
LAFAYETTE

Several weeks ago I solicited one of our younger practitioners to join our local county medical society. He looked me square in the face and said: "Why, Keiper, it is not worth the time and money to belong to a medical society." I made no reply, for what reply can one briefly make that will be convincing? The only answer to such a question is the example that every member of the organized profession can show that he or she possesses something of learning and experience which cannot be secured by those outside the pale of organization.

Perhaps the criticism is just in our case. In fact, when criticisms are made thus I am prone to take them home for careful examination and investigation as to their truth or falsity. If true, then steps should be taken to overcome the fault by facing about and doing the things which have been left undone. Thus we are able to make our failures and mistakes stepping stones to success. The most successful man or organization in the world is not the one that makes no mistakes, but rather the one who makes the fewest mistakes.

What do we get for our membership?

1. The monthly JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

2. Participation in the Medical Defense Fund.

3. The privileges of the annual meetings of the State Medical Association.

4. The privileges of the local society, and thus membership in the American Medical Association.

We will take up each of these items, but in reverse order, to ascertain if possible if it really does pay to devote time and money to the organized profession. We certainly are concerned with the value of the time element involved.

1. The local society represents (a) an organization in the profession, and (b) an organization of the profession (after Osler).

Who are the members who constitute this organization? To properly answer that question, my mind reverts to an ancient writing in which the author is given a view of the future life. He is accompanied by a guide who shows him the marvelous wonders of the eternal city, as well as its population. Coming to a great company, the question is asked, "Who are these which are arrayed in white and whence come they?" And the reply is made, "These are they which came out of great tribulation and have washed their robes and have made them white." And now let me digress to say that no one makes a mistake as to the origin of these quotations. When used once before for another purpose a bright mind spoke up and said, "Doctor, you have evidently been reading Dante's Inferno, haven't you?" This is not a vision of hell, but rather a vision of St. John in the Apocalypse of the heavenly city, the goal and ambition ultimately of all of us, I trust.

Please note that the word "tribulation" is used here, and it is the key word to the whole quotation. The word "tribulation" comes to us by the way of the Latin language. Its origin is in the word "tribulum," which means a flail, an implement universally used to thresh out the wheat centuries before the advent of the twine binder and threshing machine. It means that wheat and straw are so cohesively bound together that it requires hard work to separate them, and so our ancestors pounded them apart with the flail. This leads us to remark that while the process was hard on the straw, it was mighty good for the wheat.

In these days of a strenuous education, of all who enter the first grade at school, but 25 per cent. graduate twelve years hence from the high school. What has become of the lost 75 per cent.? Death has claimed many. The grim reaper has threshed them out. Sickness has claimed more, and has disabled them from the further pursuit of knowledge. The needs of the family have put many children to work in order that the necessities of life may be forthcoming. The teachers have literally threshed out those of their pupils who would not or could not learn, until at the graduation time referred to above but a small minority is left of all those who started out so auspiciously twelve years before, and we may say "these are they who have come up out of great tribulation, or threshing in the discipline and learning of the public and parochial schools, of our fair land."

But this is not all. Nowadays it is required that every man or woman applying for recognition by state boards of medical registration and examination shall possess an academic degree as well as the degree of doctor of medicine. This means attendance on the literary department of a university as a preparation for the study of medicine. Of all who entered the first grade fifteen or sixteen years before, only 8 per cent. receive the bachelor's degree; 17 per cent. more have disappeared since high school graduation. And yet this is not all. Of all who graduate from our higher institutions of learning, but 2 per cent. receive a professional degree in medicine, law or theology. Of these, one half receive the degree of doctor of medicine. Of all the boys and girls who entered school with you at the age of 6, you are the only one who has endured the threshing administered all the way along the line leading to the coveted diploma that opens the way for recognition before our state boards of medical registration and examination. Of the 100 you are the selected one. We are rapidly becoming the best educated of all the professions.

But before the days of the advanced requirements, many who joined our societies and who are still with us were unable to obtain the preliminary training now possible, because there was no such preliminary training. But today they are even more valuable than the new comers, because they have what the new man or woman has not yet acquired—experience—and by which the young practitioner ought to profit in order to succeed the more quickly.

Hence our societies are composed of those who attract as much attention as did that company of the Apocalypse.

And now I ask the question, "Is it worth the time or money to be associated with an organization of men and women threshed out as we have been?"

Moreover, how have these selected folk been trained? They have been trained to the scientific spirit of scientific methods by scientific men of undoubted worth, ability and understanding, whom we always love and revere when we have passed out from under their tutelage. In other words, the men and women who compose these organizations are scientific men and women. We are intensely interested, first, in the science of medicine, and secondly, in its practical application to the needs of a suffering humanity. Moreover, let us note further with what other scientists deal. The astronomer deals with worlds hundreds of millions of miles away from us. The geologist deals with inanimate matter in rock and soil. The botanist with the beautiful flowers and growing plants. The zoologist with the beasts of the field and the birds of the air and the fish that inhabit the waters. But it is committed to us to deal with the climax of creation, the living body of man, the most valuable asset in all the world and for which all other creation came existent first and for which all creation now exists. We are the only folk in all this world who deal seriously with the tenement of the individual we call man.

Such thoughts as these ought to dignify all of us, but let us be careful that we do not step too high in such contemplation. Let us be humble in the face of the great trust committed to us. We are the court of last resort to which for relief come the sufferings of humanity. But no court presumes as an individual always to decide all questions affecting its jurisdiction. The higher the court the more compose it, so that by the interchange of ideas decisions may be rendered in strict accord with the law and equity. Such is its organization and such of necessity must be our own. Every meeting of a county medical society should be the court to which we bring our problems of practice and solve them by the help of the experience of others.

Hence we need cooperation. Cooperation in work raises a man's worth to its highest power. By geometrical ratio two working together make four, not two: four working together make sixteen, not eight: eight working together make sixty-four, not sixteen: and so on. Holy writ raises it even higher, for we read therein that one shall chase a thousand, but two shall put ten thousand to flight. Team work means

everything in any endeavor in life and it is not to be despised in the practice of the healing art. The magnificent success attained by the Mayo clinic is nothing more or less than that of workers together. No one knows it all, and it is best to have some one else handy to supplement what we do not know and which we may as well know.

Along this line of thought the medical society may do three things: (1) promote unity and good fellowship; (2) promote postgraduate study; (3) found and support a medical library (Osler).

1. Promote good fellowship and unity. To be up to date we must be in touch with men and women up to date. We may do this by reading their articles, either in book form or as they appear in the current literature in the medical journals. "Reading maketh a full man." We not only get new information thus, but often what we are reading releases from some nerve cell in our brain some information therein stored and which has lain there inactive for years perhaps. In other words, we renew our knowledge and work it over. We review it. It is a wise custom, for example, for one to buy a new *materia medica* volume every five years and read it through not only to find out the new things but also to review what is standard and thus keep up to date.

2. By writing articles based on our own experiences, that is, assume authorship. Inasmuch as we read the experiences of others in reading their articles and thus absorb their experiences it is merely a matter of duty that we shall do likewise. This is the ethics of authorship. Freely ye have received, freely give.

3. By attendance on the meetings of the medical society which are the gatherings of men of science—medical science. Any well-governed medical society will offer opportunities for the reading and discussion of papers presented by its members. It is better to hear the author of a paper read his paper than to read it without his presence, as in a medical journal. The personality reading the paper imparts to it a flavor which is absent when we read it unacquainted with the author. At this point the correspondence school falls down. Education imparted thus is valuable, but in the great majority of cases is abandoned soon because a printed page is a mighty cold thing from which to teach a person. What is needed to make education most effective is a personality imparting it, as is done in the schools or the society. Personally

I have never attended a medical meeting but what I have learned something. The criticism is often expressed by some that they do not attend society meetings because some one is so long winded and that they learn nothing. What such critics need is a revamping of their mental makeup: in other words they must change their point of view. It is surprising what we learn from the humblest of people. It was a colored bootblack in Chicago that started George Ade on his way to fame. One day Ade went into a bootblack's chair to get a shoe shine. Before a minute passed he found that Pink Marsh had a philosophy that was worth writing down. He did it. Pink was an illiterate and could not do it. When Ade published it in the paper on which he was then working it proved an instant hit. The 10 cents paid for a shoe shine laid the foundation of the greatness of our own Indiana Ade. Every day he went for a new installment of Pink Marsh's philosophy which set folks to thinking, and that is what philosophy is for.

We got iodid of potassium from the horse doctors. They taught us its use. I say horse doctors, sort of despised folk in those days. They call them veterinarians nowadays, because they are getting educated just like us. One of the most valuable remedies ever given for the cure of trachoma is Prince's mixture. Prince got it from an old woman. So we may go on multiplying instances like these and come to the same conclusion, and say as did that incomparable philosopher, the Apostle Paul, "I am debtor both to the Greek and Barbarian: both to the wise and the unwise."

The medical society ought to promote postgraduate study. The killing vice of our profession is intellectual laziness. Once in a while a physician afflicted thus wakes up and finding himself behind the times hies himself off to a postgraduate school in order to brush up, at rather a large expense. He could have avoided all that by attending carefully to the current literature and by attendance on the meetings of the medical societies, county, state and national, and by participating in the proceedings thereof.

There is no danger of our knowing too much. Remember we have 3,000,000,000 nerve cells in the cortex of each of our brains. These cells are the repositories of impressions received through the special senses. No man can fill but a minority of them in a lifetime. These nerve cells thus filled and properly correlated make knowledge possible and these groups connected with tracts leading to hands, feet, eyes and ears and getting in touch with the affairs of life make wisdom. The late novel and the corpulent

newspaper distract us from the reading that we most need.

Really we had learned but little of medicine when we received our diplomas. We barely laid the foundations for real medical knowledge. Some of us soon found that out when we faced our first real emergency away from the help that we had been accustomed to receive from our superiors in school and hospital.

Though we are a body of scientists especially trained for our work, yet we cannot deal with the certainties of an exact science in prescribing for the ills of the human body. We cannot deal in promises, except to do our best. We deal in probabilities only. Men and women are not like blocks of wood to be fashioned at will. Everybody is different from everybody else. But this is possible: we can make over our probabilities into possibilities. "Nevertheless, few occupations are more satisfying than the practice of medicine if one will bring to it the philosophy of hard and earnest work" (Osler).

Postgraduate instruction ought to come from our patients, our books and journals, and above all from our societies, and not from the postgraduate medical school, except in rather rare instances. Plato's dictum, though uttered over 2,000 years ago, is still good: "Education is a lifelong business."

In unity and friendship we lay the foundations for postgraduate study, so necessary for the usefulness and success of the profession.

Then, too, the associations of the medical society tend to ameliorate those differences which in the time past have been the bane of our practice. "The robe of Æsculapius has been rent by the quarrels of sect against sect and doctor against doctor." When reduced to their last analysis we find that the nonessentials have been the great cause of our troubles. "Another has been the idle tales of our patients, the pinpricks of practice."

The medical society is the clearing house of practice. We do not take stock often enough, and are liable to carry on the shelves of our minds a lot of worn-out medical knowledge without even knowing it. The medical society will help us to keep up to date provided the members thereof are willing to do four things:

1. Exhibit pathologic specimens.
2. Exhibit patients.
3. Read and discuss papers.
4. Eat together frequently.

Exhibiting pathologic specimens is a great aid in helping us to clear up obscure diagnoses. We pride ourselves often as diagnosticians, but

let us not forget that with all their skill the men of the Mayo clinic presume to make diagnosis in only 50 per cent. of their cases before operation. The work of the pathologic institutes abroad are exceedingly impressive, and, by the way, is the secret of success that centers like Berlin, Vienna and Paris have attained. The postmortem is the cause of their popularity, because by it they discover the cause of disease. In a visit to Vienna the writer ran across this incident. Ruttin of the Urbanschitz clinic told him that after well-performed mastoid operations patients sometimes passed out in a most unexpected and unexplained fashion. To the dead house they went to find out the cause of the trouble, and found that a meningitis had been the cause of death and that the brain had been infected via the labyrinth of the ear. Hence was devised the well-known labyrinth operation of the Vienna school. The doctors attend the postmortem operations on their dead patients with bedside records in their hands to find out whether their diagnoses are to be confirmed or rejected.

The exhibit of a disease in a live patient will teach us more in a minute than we can get from the books in an hour. The educated eye is remarkably swift in taking in all the details of a situation. It was my own pleasure recently to have attended a clinical meeting of the Indianapolis Medical Society, at the city hospital. There was a medical clinic showing nothing but tubercular cases and a general surgical clinic, for diagnosis. While both showed cases out of my own particular line of work, yet I was highly instructed and entertained because I learned anew some of the things that I had forgotten.

No society should fail to have at each meeting a well-prepared paper on some medical or surgical subject. The effect on one who will submit to the discipline of preparing such a paper is wonderful. The late and lamented President Harper of the University of Chicago once said that if he wished to find out all about a subject he wrote a book about it. He meant really to say that in order to write a book about a subject he must know all about it. It caused him to make search for the material for it. It was research. So in writing a paper on a medical subject the writer must do more or less original research which is most excellent brain and mind exercise. The discussion that follows the reading of a paper is often more valuable than the paper itself.

To eat together frequently is greatly conducive to good fellowship. Somehow or other a

full stomach is quite a sedative to a mind rent with jealousy and torn with strife, especially if filled around a festive board crowded with our competitors, rather let me say confrères, for after all we are workers together for a common good. Hence let us not forget "the assembling of ourselves together as the custom with some is."

The personal hope is that in the very near future the cities like Lafayette may possess new and up-to-date library buildings in which will be medical alcoves which in time will grow into libraries which will be a place of resort for the best that there is in medical knowledge and lore. The great medical libraries of the Medical Society of the County and City of New York, of the College of Physicians of Philadelphia, of the Medical and Chirurgical Faculty of Maryland, of the Detroit Medical Society, and the minor ones in thirty other cities are wonderful stimuli to medical research and reading, with consequent improvement of the minds and practices of those who use them. Great minds, medically and otherwise, do not come to their fruition at a leap, but the rather by accretion, little by little.

In the United States we have, according to the Directory of the American Medical Association, 143,586 doctors (physicians). Of these, 76,020 belong to the different medical societies. Why not more? Because commercialism has seized us. We call it a business. Our fathers called it a practice. In all our prosperity we need to pray the prayer of the litany against its evils.

Membership in our societies entitles us to the privileges of the annual meeting of the Indiana State Medical Association. Its program is most carefully prepared and is of the highest grade. Especially was this true of our last meetings at Indianapolis and Fort Wayne. Especially do I wish to direct attention to the scientific exhibit held at the building of the Department of Medicine and Surgery of the University of Indiana. The annual orations are by the masters in medicine and surgery, and are worthy of the men who deliver them. One who will attend the annual meeting will return home enthused at what he or she has seen and heard.

Membership in our societies entitles each one at a small cost to participate in the medical defense fund. It certainly must be most comforting to a brother practitioner who is so unfortunate to be the victim of a malpractice suit to know that at his back stand 2,500 doctors who with their money and influence will defend him

in his trouble. For this reason alone we ought to have 4,000 members in our State Medical Association. What must be the effect of such an array on the one who is seeking damages, in the vast majority of cases, unjustly?

Membership in our societies entitles one to receive monthly *THE JOURNAL* of the Indiana State Medical Association, edited by an aggressive and most capable editor. It is recognized as the best of all of our monthly state association journals and is strictly up to date, and worth more than it costs. It was a prolonged fight that was waged in order to get it started, but no one now doubts the wisdom that created it.

Membership in our societies entitles one to apply for and receive membership in the great American Medical Association. The national organization through its Council on Pharmacy is the only clearing house that we possess whereby we can be sure of our current materia medica and therapeutics.

Its annual meetings, both general and sectional, are attended by enthusiastic men and women from all over the country. The meetings furnish a stimulus for good work which lasts forever almost. One of its greatest features is its scientific exhibit, for the creation of which the Indiana State Medical Association is responsible, for when we moved from our Richmond meeting the scientific exhibit that Dr. F. B. Wynn, our President just retired, to the meeting of the American Medical Association at Columbus, Ohio, it was resolved that the work of the Indiana State Medical Association so well prepared should be continued as a feature of the national meeting, and so well done was it by Dr. Wynn that the House of Delegates of the American Medical Association decided that he should be the chairman of the committee on the scientific exhibit, and at the head of that committee he has been chairman ever since. The exhibits gathered by him have been magnificent in the extreme. Indiana should feel proud that it was the creator of such a magnificent enterprise. Then *The Journal of the American Medical Association* is worth the price of membership therein. The late Dr. N. S. Davis of Chicago, one of its founders, took his only vacation in attending its meetings.

And now I submit it to you that it is worth the time and the money that it takes to belong to the organized medical profession.

While we look to a prosperous future always for our beloved profession, thus let us learn once in a while to look backward to contem-

plate those lives whose achievements, while now history, made possible our glorious present all the way from Æsculapius through Galen down to our present time, and to remark with Kipling:

"The men bulk big on the old trail, our own trail, the
out trail,
They're God's own guides on the long trail, the trail
that is ever new."

CONSERVATISM IN CESAREAN SECTION *

J. W. SHAFFER, M.D.
LAFAYETTE

Cesarean section is an operation for the delivery of a child through the abdomen of the mother, in recent years by a median line incision.

The indications for a cesarean section are classed as absolute and relative. It is becoming more commonly agreed among recent authors that an absolute indication is the only indication from a scientific standpoint. It includes the class of cases where the pelvis is too small to deliver a living child, that is, is deformed to 7 cm. in the true or conjugate diameter, and the outlet, bi-ischial diameter, is likewise contracted to 7 cm.

The relative indication includes all other conditions that may exist that would possibly permit the delivery of the child, but at a risk for both mother and child. Under this classification are placed eclampsia, placenta prævia, tumors obstructing the pelvic canal, etc.

Owing to the fact that there are frequently found such conditions, it is imperative that all women with first pregnancies (and best that all multipara) should be examined to determine if the pelvic capacity is sufficient to permit of a child's passage. If, in the opinion of the examiner, there is some abnormal condition existing, he should take extreme care in making accurate measurements, both external and internal.

External pelvimetry is of service, but will not give accurate measurements of the pelvic capacity. The internal measurement is what we need to know, hence is of far more importance and a procedure with which we should familiarize ourselves.

Any textbook will give methods of securing measurements with instruments, both external and internal.

I believe such examinations should be made before midterm, as it gives you plenty of time to guide the patient; to think it over and be prepared, and in case of some obstructing tumor, such as dermoid or ovarian cyst, you may be able to remove it, irrespective of pregnancy.

The use of the various instruments for internal pelvimetry are painful to the patient, and hard to use without danger of causing movements and complaints from the patient, rendering such results inaccurate. The better, easier and just as accurate way is by digital examination. An experienced finger can very readily and easily determine the presence of growths, condition of cervix, position of uterus and fetus, and accurately get the pelvic capacity. By carrying the index and middle fingers backward and upward until the tip of the middle finger touches the promontory of the sacrum, then noting the exact point on the index finger where it touches the inferior posterior surface of the pubic bone, and then measuring the distance between these two points, we can be quite accurate in getting the true conjugate. From the total distance found in this measurement there should be deducted $1\frac{1}{2}$ or 2 cm. to allow for the angle of the pubic bone.

Due aseptic precautions should be observed in this manipulation. There is, of course, not the danger in examining at this stage of pregnancy as in labor.

The average measurements of the pelvic cavity are:

Conjugate	11 cm.— $4\frac{3}{8}$ in.
Oblique	12 cm.— $4\frac{1}{2}$ in.
Transverse	13 cm.— $5\frac{1}{4}$ in.
Averaging	12 cm.— $4\frac{1}{2}$ in.

The Hirst instrument for making internal measurements is recommended as being the least objectionable from causing pain. In case the pregnant woman is found by examination to require a cesarean section, she should be carefully guarded during her remaining pregnancy, all unusual symptoms carefully cared for, diet, eliminations, urine analysis frequently made, and avoiding as far as possible respiratory infections.

The date of expected labor estimated. The usual time given is about 280 days. In the last 500 cases of labor in which I have kept record, counting from the first day of the last menstruation to the day of labor, the average time was plus two-thirds days; some occurring two weeks before, others as much as over, and about one in twenty-five occurring on the exact day. I

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believe it safer to have the woman removed to the hospital a few days before the expected labor for close observation and unless labor begins before, do the cesarean section between the 270th and 280th days of pregnancy.

It is safer not to allow the woman to enter labor. The vitality of the child should be determined as best possible as indicated by sounds of the heart and movements. An operation at this stage eliminates certain risks, such as having to hurry preparations, delaying for an hour or perhaps longer to prepare operating room and secure assistance, perhaps not being able to eliminate from the bowels sufficiently, labor may be rapid and severe, the danger of rupturing membranes and undue pressure on the child, placenta or cord is eliminated; further, the child will be just as viable and as apt to live, and by eliminating the foregoing risks there is less danger to both mother and child.

In a case where the pelvis is extremely contracted—the conjugate being 5 cm. and the child is dead—the indications are for a cesarean section, because it will be impossible to deliver a dead child through such a narrow pelvis.

There has been a great deal of discussion recently as to whether cesarean section is ever justifiable unless there is a pelvic contraction to 7 cm. or possibly 8 cm., thus ruling out the classification of relative indications for cesarean section. Rudolph Holmes, in a recent and comprehensive article entitled "Obstetrics — a Lost Art," sets forth very convincing arguments for conservatism in cesarean section. He states that "A woman with a conjugate of 9 cm. may be allowed to enter labor under careful watching in a hospital where cesarean section may be done if need be—no vaginal examinations being allowed after the first preliminary examination, the progress of the labor being determined by rectal examinations which can be as accurately determined as vaginal, with experience. If the test of labor fails to be a successful delivery, a cesarean section can safely be done any time, but such a case is entitled to the benefit of the doubt." It frequently so happens that a successful delivery may be had. Many times we see women continue a distressingly long time in labor and finally deliver themselves at about the time we are ready to use forceps or prepare for a cesarean section. This often happens when the membranes are intact, causing the child's head to float above the brim. When the membranes are ruptured the head coming down on the lower uterine segment stimulating the phenomena of uterine contractions, and labor continues on to a satisfactory termination.

The cesarean section, like the ovarian operation, seems to be in danger of being abused. Because of a more perfect aseptic technic, the operation has been shorn of its great dangers in clean cases where mother and child are both in good condition, and perhaps is the safest method for the child known to date. It is a different circumstance concerning the mother and her future.

I believe it a safe axiom—quoting from Holmes—"Once a cesarean, always a cesarean," and that there is but one true and scientific indication, and that is where there is a justo-minor pelvis that positively will not admit of a living child; in such case the mother can never be delivered in future pregnancies except by cesarean operation. Of course, there are exceptions to these cases, but they should not be considered until the patient is given the benefit of the best judgment, counsel, experience and knowledge.

The danger to the mother in her future pregnancies are by no means small, if allowed to enter labor, and especially if she has not been submitted to a normal delivery; the birth canal being peripheral in state, the prolonged labor and hard pains or contractions against a weakened uterine wall, produced by scar tissue, is likely to cause a rupture of the uterus through the scar, as has been recorded in many cases. It is better to do the subsequent deliveries by cesarean section than submit the woman to the danger of a rupture. Holmes records three deaths of the mothers from such cause in 180 cases. These deaths rightly belong to the cesarean operation, but of course were not so accredited.

Craigin gives as causes for cesarean section in 150 cases, contracted pelvis 116, against all others, at the Sloan Hospital.

In deciding any one case for cesarean operation there are some very important points to consider and decide. If the woman has been in labor long—hours or even days—and repeated examinations have been made by questionable hands and asepsis, many, and possibly prolonged, attempts made at delivery with forceps, the woman exhausted, the fetal heart beats rapid and faint and movements less, it is too great a risk to attempt a cesarean. To deliver the mother by such operation and have her or the babe or both to die from shock, infection, exhaustion or many causes, is bad obstetrics, poor surgery and a great disappointment to the friends and doctor alike.

If we know that the woman must have a cesarean operation, she should be examined little or not at all by vagina, as such examina-

tions are very dangerous because of carrying infection in labor.

It is surprising, even shocking, to see reported cases of cesarean operations for all sorts of conditions and presentations, albuminuria, pyelitis, face and brow presentation, occiput posterior, even breech presentations and all degrees of eclampsia and placenta praevia. No doubt there are some that are legitimate, yet I can but think that if the art of obstetrics were more carefully learned and practiced, as some of the old masters perfected and practiced, there would be less cesareans and more mothers and babes to give us their blessings.

The surgeon who will continue doing cesarean operations indiscriminately will perhaps repent his folly in later years. The pendulum of reaction is swinging away from too much cesarean and toward more conservatism in obstetrics. Why with all the niceness of obstetrical manipulations that have been devised and successfully practiced, as the Braxton-Hicks bimanual version, internal version, rapid dilatation by Harris manual method, or rubber bag inflation, the high application of forceps or axistraction forceps, why, I ask, do we need rush to cesarean and forever condemn the woman to cesarean or greater danger of a ruptured uterus in an effort at normal labor?

I cannot agree that eclampsia is an indication for a cesarean unless pelvic conditions are present. Think of a woman whose blood is charged with a toxin, that renders her unconscious, paralyzes her sensations and overwhelms her whole system until she is in convulsions, then submit her to the shock of an anesthetic, an operation double a laparotomy, producing further stases of the bowel and kidney, thus locking almost completely the excretions! Can you imagine worse obstetrics or poorer surgical judgment.

R. Peterson recites 530 cases of eclampsia treated by vaginal cesarean section with a mortality of 124 or 23.4 per cent. Of 500 abdominal cesarean sections, 174 died, mortality of 34.8 per cent., making 11.4 per cent. in favor of vaginal section. In placenta praevia, according to Holmes, in a given number of cases by cesarean section, the maternal mortality was 20 per cent. and fetal 36 per cent. The obstetrical treatment gave a majority of 7 per cent. maternal and 55 fetal, giving one baby for every mother sacrificed.

DeLee favors cesarean section in placenta praevia, if the woman is in good condition, the child alive, placenta central or largely covering the os.

OPERATION FOR CESAREAN SECTION

The operation for cesarean section is conducted as any laparotomy, plus the opening and closing the uterus. The incision is about 8 inches long, one third above umbilicus and two thirds below and to the right side along median line. The uterus is lifted out of abdomen, surrounded with warm pads, the upper angle of wound temporarily closed down to cervix, with two or three sutures or tanacula forceps to protect the abdominal viscera and prevent fluids entering the abdominal cavity. An incision of 5 inches is made in the uterus beginning by a buttonhole cut large enough to admit a scissors point, the remainder to be made with scissors; the membranes are ruptured and child grasped by one leg and delivered, cord is clamped long between two hemostats and severed between the clamps, then the child handed to a competent assistant to be revived. The child frequently seems sluggish and does not breathe as does one born naturally, perhaps due to the fact that the respiratory center in the brain has not been stimulated by over carbon dioxenized blood from birth pressure on the cord and placenta, and partially also from the anesthetic of the mother, which also affects the child, it being more or less anesthetized. However, it seldom fails to be resuscitated when at full term and healthy.

The hemorrhage from the uterus is momentarily free, but need not alarm, as the contractions after the removal of the child and the placenta quickly cause the hemorrhage to stop.

After the placenta is removed the uterus should be wiped clean with moist sponges. The cervix may be dilated, if not so already, by forcing a finger or two through it. It is not necessary to place a drain through the cervix, as the lochia is not as free from a cesarean as normal labor. The uterus may be irrigated with warm normal salt solution at 110 F. and allowed to flow into the vagina. The uterus should be closed by three rows of sutures, a few interrupted of No. 2 catgut chronic bringing the muscle close together but not passing through the mucosa, a continuous No. 2 plain catgut passage through superficial layer of muscle and serosa, and finally a continuous No. 2 catgut through serosa covering, over the line of sutures to prevent adhesions. The closing of abdomen is the same as in any laparotomy. The time consumed in delivering the child should be very short—one to two minutes. The anesthetic should be carefully given and as short as possible on account of the danger to the infant and the shock to the mother. The

whole operation should be completed in from thirty to forty minutes. The after-care is the same as for any laparotomy.

The mortality for the child in cases of vigorous, healthy children is about nil.

DeLee reports 1,282 cases collected by Routh in the statistics of Great Britain in 1910. In favorable cases the mortality was from 2 to 4 per cent. Where labor had been prolonged and attempts made at delivery, 34 per cent. and over; labor progressed some time and membranes ruptured, 10.8 per cent.; labor in progress short time and membranes intact, 2.2 per cent.

CONCLUSIONS

1. Cesarean section is indicated only in cases where the pelvis is too small to admit of delivery of a living child.

2. Eclampsia, placenta praevia, malpresentations and tumors are not indications within themselves for cesarean section, but when accompanied by other complications may be indications for cesarean section.

3. A justo-minor pelvis of 7 cm. is positive indication for cesarean section.

4. "Once a cesarean, always a cesarean," is a safe and sane axiom, because of danger of uterine rupture, and because in cases of positive indications for cesarean section the woman will never be changed to admit of normal labor.

5. Justo minor of 5 cm. with dead child is positive indication for cesarean section.

6. Cases of justo-minor pelvises that would be positive indications for cesarean section, but have been submitted to dangerous and frequent examinations and attempts at delivery, with mother exhausted by prolonged labor, dilatation partial or complete, membranes ruptured, the child injured by instruments and signs of weakness of the child, cesarean section is contraindicated, but craniotomy and embryotomy are methods of choice and safer for the mother.

DISCUSSION

DR. A. S. JAEGER, Indianapolis: I wish to voice my appreciation of Dr. Shafer's paper and commend his honesty of expression, but the fact is that a man's honesty of opinion is not always founded on sane reasoning, and while it may be academically and theoretically a fact that a justo-minor pelvis is the only scientific indication for cesarean section, I want to go on record as saying that often theoretically and scientifically justo-minor pelvis is not the only indication for cesarean section. There are

many other indications largely in the individual case just as absolute as a justo-minor pelvis.

I will ask you gentlemen for a minute to take the view of the obstetrician and just consider yourselves the average husband and father—would you rather choose to have your wife undergo a cesarean section, regardless of what the doctor has said, which is only accompanied by slight shock, because even in the case of eclampsia the shock or deterioration of the mother's system produced by the anesthetic is no greater than the same anesthetic if given for the vaginal removal of the baby—would you rather have your wife undergo a clean, surgical, abdominal operation for the removal of the baby, or manipulations which mutilate not only for a transient period, but for life? I am the father of four children, and I tell you, gentlemen, if God gives me any more, and I have to choose between a mutilated vaginal procedure and a clean, abdominal surgical operation, I would select cesarean section. What I would do in the case of my own wife, I would do in the case of another man's wife.

It is not the truth that rupture of the uterus is the only theoretical and scientific indication for cesarean section. What are we going to do in those cases of tumors where they start in the nonpregnant as a submucous or mural fibroid which obstructs the uterine canal? Should we wait? What else is there for us to do but cesarean section?

As regards cesarean section in eclampsia, it seems to me it is largely a question of personal opinion and experience. We must not adapt the patient to the operation, but rather adapt the operation to the patient. I do believe that if the case is seen early enough or the physician has nursed the patient along, many of the cases may not have to undergo cesarean section for eclampsia if seen and cared for by the obstetrician. But the case only comes to him after the woman has had convulsions for two or three days. Perhaps she has had fifty or sixty convulsions in that period of time. In a case like that a primipara, in whom there is an undilated os, who has a blood pressure of 200 or over, the quickest and safest way to deliver that woman is by cesarean section after taking into consideration the increased shock plus mutilation which must result by accouchement force.

It has been my fortune to have performed forty-three cesarean sections in the last seven years. My mortality has been five cases. Four of these cases were City Hospital cases, and you naturally appreciate the condition in which these women came into the hospital. There was nothing else to do in three but to make a postmortem cesarean section. There was not the slightest hope of saving the women. The method was to get the baby out before it died and give the mother one chance in one thousand.

While that is against my mortality record, I do not think this cesarean section had anything to do with the mother's death. We have three living babies to show for it. The fourth case was one of rupture of the uterus with full grown cervix in which there was complete amputation of the uterus. We lifted up the uterus, snipped off a few shreds of tissue, and positively there was complete necrosis of the omentum. That woman continued to live for two or three hours. The baby was dead. The fifth case was a City Hospital case in which the woman developed measles after she was operated on, developed a double pneumonia and died in two days. We cannot attribute her death to cesarean section; it was simply a complication which had nothing to do with the obstetric condition.

I have not lost a mother or baby in the private cases, because usually, as the doctor has said, they are seen early enough to be taken care of, and they call a surgeon before it is too late.

To a certain extent this bugaboo of rupture of the uterus following once a cesarean section is a mistake. I have three or four living babies taken from patients who have undergone a primary cesarean section. These mothers went through uninterrupted normal deliveries, and had no trouble which could be attributed to the previous cesarean section scar.

The mode of procedure in each case must be suited to the individual condition. In some cases these women can be delivered without cesarean section, whereas other cases would demand cesarean section by intuition. Some peculiar intuition tells us that it is unnecessary to do a cesarean section, and to make an open confession, last year at the Indianapolis meeting I said I thought high forceps delivery was next to criminal. I created adverse comment and some animosity, but in a general way I still hold to that point of view. Four weeks ago I did a high forceps delivery in a woman in the City Hospital, not because it was the right thing to do, but my intuition told me it was the best thing to do in that particular case.

DR. THOMAS B. EASTMAN, Indianapolis: In the preceding paper there was a good deal of discussion about the differential diagnosis, and one of the most difficult points in differential diagnosis which some of us have to contend with is to differentiate between wind and wisdom. (Laughter.) Now, then, there is nothing personal in that remark. I refer to the cyclone of literature which has swept over this country advocating cesarean section for almost everything except club-foot. There are several reasons for this. The laity thinks cesarean section is a wonderful operation, when, as a matter of fact, it largely consists of making two incisions and closing them.

Dr. Shafer has sounded a note of conservatism. He quoted Dr. Holmes as saying that obstetrics is a lost art. I believe it. Anybody can do a cesarean section or can learn to do it in ten minutes, provided he knows how to be clean; but I tell you, it takes some skill to do a version or to make some of these forceps deliveries. Dr. Jaeger says that he believes the high forceps operation is a crime. The way it is done by some of our immature obstetricians roundabout, I grant him he is right. I never saw him do one, so I do not know where to classify him.

Dr. Shafer is conservative where I would be radical, and radical where perhaps I would be conservative. I believe he really narrows the indication for cesarean section too much because I have seen, and you have all seen, for instance, cases of placenta praevia where it was better, I think, to do a cesarean operation, although I grant statistics are against such a statement. But statistics are not always dependable.

In cases of eclampsia, too, I have seen cesarean section done. I have done them myself in such cases where I felt sure the sudden cessation of those processes which the pregnancy is going through brought about stimulation, and there has been recovery from the disease. We all know what the removal of a toxic thyroid does to a patient within a few hours. So I believe cesarean section is indicated in a good many cases.

Now, as to the axiom that "once a cesarean section, always a cesarean section," it is one of those truths that is nine-tenths wrong. We know that rupture of the scar in a secondary cesarean section is common, but after all, we know women deliver themselves after a cesarean section by normal means. It is wonderful what Nature will do. We do not think of Nature as much as we should always; but the thing to do in these cases is to put the woman in a hospital, have everything ready, let her go into labor, and then, if anything happens, we can open up and take the uterus out.

We have been told that Nature nearly always takes care of these internal hemorrhages, and I see no reason why we should not give the woman a chance to give birth to her child naturally. I do not believe it pays us to devote much attention to epigrams. We are overwhelmed with axioms such as that quoted, and let us not deceive ourselves.

DR. H. A. DUEMLING, Fort Wayne: There were some statements made in the paper which require discussion, though some of the points have been picked up and discussed by the previous speakers.

I would like to go on record as saying that I do not agree with the essayist that where the

pelvis is too small to deliver a child alive, that is, the pelvis is deformed 7 or 8 centimeters in the true or conjugate diameter and the outlet is contracted, we should resort to cesarean section. I believe to advocate this as an indication for cesarean section promiscuously is all wrong, as each case must be a law unto itself. Here is a woman, for instance, who has a diameter of 9 centimeters, with a baby of 14 or 15 pounds. I do not insist that is an indication for cesarean section. The measurements must be considered with other conditions that are present.

I have a record of something over fifty cases of cesarean sections done for almost anything. A number of these women have been delivered secondarily in the normal way. The cesarean sections were done for tumors and for other pathologic conditions, not depending entirely on contracted pelvis, and some of them have been through absolutely normal labors once or twice since.

We are told that rupture of the uterus following cesarean section is a common thing. I do not recall having seen a single case of rupture of the uterus following cesarean section. I believe a whole lot lies in the method that is used in closing the wound as to whether there is a rupture later on or not. It has been my practice in closing the uterine wound to make a continuous suture. I have a very long thread of ordinary, plain, iodized catgut, No. 3. I begin my suturing at either end of the wound; I miss the mucosa entirely. I bring the thread through the entire extent of the wound and bring it back to the center of the muscular wall formed in the incision and tie the two ends together. If you place interrupted sutures of catgut, in biting it may untie itself. If you do not watch, the catgut unties itself at these invisible ends. The catgut swells from taking out fluid, and naturally easily unties itself. When it is continuous that danger is avoided. My last line of sutures is a continuous one to close the peritoneum. I have had a chance a few times to see the scars in the uterus after cesarean section in later years when operating on patients for other intra-abdominal conditions, where the operation was indicated, and I can say to you that these scars are firm, and I do not believe anything could interfere with their holding properly.

You will find in the pathologic exhibit a specimen of intraligamentous fibroid which occurred in the right broad ligament. This woman was a primipara and carried her pregnancy for eleven months. There was some discussion between physicians as to whether she carried it ten or eleven months. The child was extracted by cesarean section. We did not want to lose the baby's life nor the mother's life. Should

we wait in such cases? It was absolutely and unqualifiedly impossible to deliver the child by any means other than cesarean section.

Let us take the case of a woman with a large ovarian tumor. A doctor said, can you puncture that through the posterior culdesac, let out the fluid and allow the woman to have a normal delivery? I told him I thought I could, but I got cold feet. Subsequently I opened the abdomen and found a tumor which was loose, as dermoids usually are, and I had some fear we would smear hair and oil all over the abdomen. That is all there is to it.

On one occasion I had a case where I thought it would be necessary to open the abdomen to deliver the child, but instead of it being a case of pregnancy it was an impacted fibroid of the ovary, the first I had ever seen.

With regard to the statement, "Once a cesarean, always a cesarean," that is not true. The facts do not bear that out at all, and I want to go on record as stating that craniotomy on the living child in this age and day of the world is plain murder. There is no excuse for doing craniotomy on a living child. The child has rights we are bound to respect, and we certainly do not respect its rights when we deliberately, because the child cannot kick, punch a hole in its head and let its brains out. We have no right to do that. It would be all right to do it on a dead child if the mother's life was in danger, but it cannot be done without considerable effort.

I do not want to say that a high forceps operation is as bad as a cesarean section, or that a cesarean operation is safer than high forceps. There are those who are skilled in the use of high forceps, while others are not, and that fact should be considered in connection with these cases. Cesarean sections have become quite common. Dr. Eastman has told us that cesarean section consists in making two incisions and in closing them again, and according to Dr. McDonald of Warsaw, it means a whole lot of sewing. I have seen one of my friends make all kinds of preparation; he would have assistants hold the broad ligaments for fear of hemorrhage. You do not have to do that. It does not do any good; you cannot control hemorrhage by that. The hemorrhage ceases immediately. I give my patients immediately an injection of pituitrin when I cut the placenta off, and then follow it with ergotol.

When once we look over our cases carefully, we will soon ascertain whether this or that case is suitable for cesarean section or not. That, of course, pertains to every case.

DR. LOUIS BURCKHARDT, Indianapolis: It would seem to me, after what has been said, that obstetrics is a lost art. At a recent meeting of the American Association of Obstetri-

cians and Gynecologists, held at Indianapolis, a doctor from Buffalo (Dr. Potter) reported 500 cases of version. Dr. Potter is a man I should say 45 to 48 years of age. He was asked how many cases he had seen or had had in order to do this number of versions, and he said about 5,000 or 6,000 cases. He had read the paper to emphasize the fact that it was not necessary to perform so many cesarean sections.

Now, there is the other side to this question. We must keep our heads level in dealing with these cases. Most of you surgeons can perform cesarean section without doing great harm to your patients, and you have been getting good results from this operation, but that is not the whole question. The question is, are all these cesarean sections justifiable, even though the patients are not subjected to any particular harm?

Those who have discussed the question of high forceps talk about the fearful manipulation of the parts. High forceps in the hands of a careful man can be done, provided he has the necessary skill, without lacerating the cervix or perineum.

I would like to ask how many cesarean sections are represented in this paper. I would like to ask another question, how many labor cases have been conducted by the same men within the last ten years, to see whether we have not got the normal percentage of cesarean sections represented here as compared with the number of labors.

With reference to eclampsia, I was very much in favor of performing cesarean section for eclampsia at one time, but I have absolutely receded from that point of view. I have found out from my own experience and from the statistics that the so-called Stroganoff procedure gives as good immediate results as cesarean section. There is a man present who ought to know, as his wife had eclampsia with her first child. That baby was lost. He now has two strapping big boys with a healthy wife without abdominal section, and yet her case was one of the most extreme cases of eclampsia I have ever seen.

The same thing holds true with reference to placenta praevia. The indications of so many centimeters of pelvic contraction are not the only ones for cesarean section. But the author says it is the only absolute indication. There are other relative indications, such as those mentioned by Dr. Duemling, of tumors, etc.

The one point I would strongly emphasize is that if we knew our obstetrics better, there would be fewer cases in which cesarean section is done.

DR. CHARLES C. TERRY, South Bend: Dr. Shafer's paper is a plea for conservatism, and it requires more courage on the part of a surgeon to be conservative than it does to be radical.

I would like to ask the doctor what objection there would be in a case of cesarean section to "Once a cesarean, always a cesarean?" It would seem to me that where a woman has difficult labor and requires the application of forceps for a long time in bringing about delivery, it would be better to deliver that woman by a cesarean section. I am opposed, however, to the surgeon doing this operation or anything else just to have a certain number of these cases hanging to his belt. I think we should be careful to make a diagnosis the same as we do in other surgical conditions before a cesarean section is done. But there are a good many other indications than those mentioned as absolute requirements for the operation. Let us take the case Dr. Duemling mentioned of tumors in the pelvis, where it is absolutely impossible to deliver the child. There cesarean section is absolutely and positively indicated.

It is true, as the author has pointed out, that in cases of eclampsia, with high blood pressure, it is safer to the mother and to the child to do a cesarean section. It is better for the woman to have a cesarean section performed. It is better for her to have it done on the ground that once an invalid, always an invalid, as many of these patients are. Let us take the many cases of difficult and hard instrumental deliveries. I do not care who the obstetrician or gynecologist is that operates, after operation these patients are not made well and never will be. In selected cases the mortality following cesarean section is practically nothing. It is one of the easiest operations we can do. It is one of the cleanest operations a surgeon can do. If that is the case, then a great many of these cesarean operations that are followed by an increase in mortality belong to the obstetrician rather than to the surgeon. They are delayed cases like the cases of appendicitis operated on late, and it is up to the internist to see that these cases are referred to the surgeon early for operation and not be delayed too long. The same thing is true with reference to cesarean section.

One point in technic is with reference to dilatation of the cervix. It is unnecessary to do anything with the cervix. On the other hand, I think sometimes we increase the infection by sticking a finger into the cervix. When the cervix is shortened in these cases we may increase the danger by doing that.

Dr. Duemling mentioned the method of suturing the uterus. In many cases the sutures are tied too tightly, so that when the uterus contracts it loosens the suture and breaks it.

Another thing that I think is of some importance is the after-care of these cases. It is well to bring the omentum down over the uterus and discontinue the binder which the nurse puts on, which squeezes the tissues over the uterus and you have adhesions where otherwise you would not if the binder was left off.

Another thing in obstetrics we should consider in doing cesarean section is the physical or general health of the mother which we often-times overlook. In many cases these women are anemic, they have gone through a stormy pregnancy, and will go through a cesarean section much easier than they will a prolonged labor, even though it is not instrumental.

DR. SHAFER (closing): I fear most of the discussants have misunderstood the purpose of my paper. They have taken my statements as absolute, but have not considered what we call the relative indications. In nearly every case cited here the conditions should have been corrected before labor began if they had done it. You must watch your patients; you must know them; you must know the pelvic capacity and anticipate these things. You are not going to let a woman go with a dermoid cyst until labor begins. You are going to interfere. You should remove the tumor before the seventh or eighth month. We do not let a woman in eclampsia go on for two or three days having convulsions without interfering.

I have done cesarean section for placenta praevia. I have done cesarean section for dermoid cyst and for contracted pelvis. In some of these cases the indications were relative, but I still contend they were not scientifically true indications for cesarean section. Had I seen the primipara with a dermoid cyst early enough, I would have removed the dermoid cyst and let her have the advantage of giving birth to a normal child through the natural passages. I have carried a woman safely through one of the worst attacks of eclampsia I ever saw. She had from eighteen to twenty convulsions in twenty-four hours. She was delivered with forceps of a living child. Both child and mother are living after thirteen years. If you pay more attention to medical treatment and obstetrical manipulations, to preliminary and early examinations, you would not have what you have termed absolute indications.

As for murdering the child by doing craniotomy, the discussant got off the subject. We are not advocating that.

We are not careful enough about the diagnosis. We do not keep ourselves in training in the art of obstetrics.

So far as the measurements of the pelvis are concerned, they are relative. If you have a child that is too large for the pelvis you have got to

adapt the operation according to the conditions. Seven centimeters is an absolute indication for cesarean operation if the child has a 9 cm. head. The bi-ischial diameter is one of the common deformities. We have to consider the proportion of the child's head to the birth canal as a standard measurement. We do not all follow our cases right. Cases are brought to us in our work and we are not as careful and particular in studying the details as we should be. I was called to assist in an operation for ectopic pregnancy that had gone on for eighteen months. The man who called me had had years of experience. At the ninth month pain came on and subsided, and the child died. The woman went nine months more and had a mummified child. We had to do a laparotomy to remove the child. Perhaps, if the physician had been doing the proper thing in watching the woman and resorting to proper surgery in delivery he would not have run the risk of losing mother and child. It is very essential for us to watch our cases to prevent the necessity for emergency cesarean section.

THE RELATION OF COWS' MILK TO HUMAN TUBERCULOSIS

WILL SHIMER, M.D.

Superintendent of Laboratory of Bacteriology and Pathology
Indiana State Board of Health

INDIANAPOLIS

Milk, like fire and water, although indispensable to man, is capable of considerable harm if not properly controlled.

The dangers in milk to the public health are intrinsic and extrinsic. The intrinsic dangers are deficiencies of food constituents as fat, sugar and proteins. These intrinsic dangers affect chiefly the poor who are not able to buy a sufficient quantity of poor milk for the proper nutrition of their children.

The extrinsic dangers are mostly bacterial which are of two kinds. One type of bacteria multiply rapidly while the other does not multiply but simply remains in suspension in the milk.

The present mode of retailing milk makes the first variety of bacteria very dangerous to the public health. Milk depots collect milk from many farms all of which is mixed together before it is delivered to the consumers. If any one lot of milk obtained from any one farmer contains typhoid, diphtheria or streptococci then the whole quantity of the milk collected is inoculated with these bacteria. If the milk

is not kept very cool at the milk depots, from the time it is mixed until it is used by the consumer every bit of the milk will contain large numbers of streptococci, diphtheria or typhoid bacilli.

If the milk as collected from the farmer contains tubercle bacilli, mixing the milk will simply decrease the number of tubercle bacilli in any given quantity of milk and thus lessen the chances of the consumer contracting tuberculosis.

Infection depends upon three things, first the number of bacteria introduced; second the virulence of the bacteria and third the resistance of the invaded organism.

That is to say, other things being equal one does not counteract tuberculosis from drinking cows' milk unless the number of bacteria taken are above a certain minimum number necessary to produce the disease.

Thus we see that the smaller the amount of milk produced by any dairyman, if he delivers his milk direct to the consumers, the greater is the danger to the community if any of his cows happen to have tubercle bacilli in her milk. If a child is taking milk from one cow and that cow has tuberculosis the child is very likely to develop the disease.

Bovine tuberculosis is very common among cattle and hogs. The United States report for 1908 shows that of 7,116,275 cattle slaughtered 68,395 had tuberculosis and of 35,113,077 hogs butchered 719,309 had tuberculosis.

The results of tuberculin tests of dairy cattle in Indiana from 1898 to 1908 were as follows:

Number cattle tested.....	2,935
Reactors	790
Percent reactors.....	11.9
Number reactors killed.....	619
Number reactors with positive postmortem	597
Percent reactors positive post-mortem	96.45

According to these figures about one dairy cow out of every ten has tuberculosis. Hence, on the average if every dairyman kept ten or more cows and mixed the milk from all his cows all of the milk would contain tubercle bacilli.

Hess examined hundreds of samples of New York market milk and found 16 per cent, to contain tubercle bacilli in sufficient numbers to produce the disease in guinea pigs by intraperitoneal injections.

There has been considerable discussion as to how the tubercle bacilli get into cows' milk since

few tuberculous cows have udder disease. If the udder as the source of tubercle bacilli is eliminated, then there is one other source, the feces. Most market milk contains 1-400 parts manure. There are two possible sources of tubercle bacilli in cows' feces; first cattle cough but do not expectorate, that is to say, they swallow their sputum. The tubercle bacilli are not digested by the stomach or intestines and thus get into the feces. In some cases tubercle bacilli get into the blood and are strained out by the liver and thus pass with the bile into the intestinal tract.

When cream rises or is separated by a mechanical separator the bacteria in the milk collect at two places, in the cream and in the sediment. The cream containing a concentration of tubercle bacilli is made into butter. The interval of time that elapses between production and use of cream, ice cream and butter is so short that the tubercle bacilli retain their virulence. As long as we continue to use raw milk or its products from tuberculous cows, living virulent tubercle bacilli will be so distributed as to insure their entrance into the bodies of persons of all ages.

Tuberculosis is readily transmitted from one cow to another. In one experiment twelve healthy cows were placed in a barn with one advanced case and at the end of two months five or 42 per cent. of the herd had tubercle bacilli in their feces. At the end of eighteen months ten or 84 per cent. of the herd had tubercle bacilli in their feces.

Tubercle bacilli are classified in three groups: human, bovine and avian. The first is found chiefly in man; the second in domestic animals and the third in birds. However, the bovine strain is responsible for about 1 per cent. of infection in man and 5 per cent. of the infections among children under fifteen years of age.

Dr. W. H. Park had tabulated 1,042 cases in which the bacilli causing the infection were isolated as follows:

	Cases	Per Cent.
Adults 16 years or over, bovine type....	9	1.32
Adults 16 years or over, human type....	677	
Children from 5 to 16 years, bovine type	33	33.33
Children from 5 to 16 years, human type	99	
Children under 5 years, bovine type....	59	37
Children under 5 years, human type.....	161	
Total bovine infection	101	
Pathological Lesions:		
Cervical adenitis.....	41	41
Abdominal tuberculosis.....	23	23
General tuberculosis alimentary origin.	14	13

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EDITORIALS

**THE NEED OF RESEARCH WORK IN
OUR MEDICAL SCHOOLS**

Anyone who is interested in the future of medical education will be instructed by reading the report of the Committee on Medical Research of the Association of American Medical Colleges which appears in the April 14th issue of *The Journal of the American Medical Association*. As the committee sees it, the function of research is an imperative duty of every medical college which hopes to maintain a standing as a good teaching institution. The reasons are set forth in clear and convincing manner and constitute a statement of facts that will be accepted very generally as true. No attempt is made to insist that large foundations of money are necessary for the accomplishment of this aim. Rather is the emphasis laid on the spirit of the research which must permeate the teaching staff. Certain factors have much to do with the fostering of this spirit. An association with a university is one of them. There we have a background of accomplishment in many lines of science which goes to make up the traditions of the institution and which have a profound effect in shaping the intellectual growth of the student. The modern man of science, from which class our academic professors are recruited, are investigators. They represent the dynamic type of mind as opposed to the static, and cultivate in their students a spirit of inquiry into the phenomena of nature which is the first step in the direction of research. Another factor is the attitude toward and the accomplishment of research work on the part of the clinical staff. According to the committee, here is where the greatest difficulty lies, and in the near future will mark the difference between the better and inferior schools. While the ability and will to do research work is demanded of the full time academic staff in the pre-clinical departments, it should be and is becoming as specifically a function of the clinical staff. Full time clinical teachers will greatly

assist in accomplishing this aim, and, moreover, will help to free the school from every suggestion of commercialism. The committee contends, and rightly, that the university laboratories and hospital should be open to those members of the clinical staff who show themselves capable and willing to investigate. Much excellent research work has been done by this class of men, and to close the doors of the university hospitals and laboratories to the stimulating presence of such men deprives the medical school of a group of workers needed for the best development of the school.

MEDICAL PREPAREDNESS

The medical profession is quite willing to contribute its share to the war demands, and probably men in no other walk of life will so very generally offer their services to the country. But while medical men, both young and old, are eager to answer the country's call, a certain amount of discretion should be used in the employment of medical men for military service if the greatest good for the country is to be accomplished. A portion of the medical profession must remain at home to serve those who, through sex, physical incapacity, or engaged in pursuits directly tributary to war purposes are not at the war front. Then, for active military service, the younger men are the ones most in demand, as they also are the ones that can be of greatest service. At base hospitals, men of experience will be required, but the mistake should not — and probably will not — be made to give the older men the preference in every case when there are younger men who can and will do the work equally as well.

Then again, the United States must not make the mistake that England made in permitting so many of the students from technical schools to enlist at the beginning of the war. If the war continues for two or three years or longer there will be an increasing demand for men skilled in the sciences to fill up depleted ranks. This is particularly true in the medical department, and in consequence our medical students of today should be urged — even compelled — to continue their medical instruction in our colleges with the distinct object in view of giving medical men to the military service a little later when these students are ready to be graduated and at a time when the medical military service may be badly in need of recruits.

Another phase of the war question as applied to medical and surgical practice pertains to

training, and here again there is room for an immense amount of work in preparing medical men for military service. The bare fact that a man is a good surgeon or a good doctor does not mean that he can jump into military service and at once prove himself efficient, for there are many problems connected with military service that are not encountered in civilian practice. He should have some training, and we are pleased to note that the government is taking steps to supply this training in advance of actual military service. Our medical colleges also should have a special course on subjects directly connected with army and navy medical service.

In short, the greatest problem of today is that of preparedness and a knowledge that preparedness does not mean for the moment but for many years to come, and we must not only provide for immediate demands at home and in the field or on the sea, but must provide for future demands as well. Conservation of our energies is imperatively demanded. Had England recognized this fact early in the war and conserved her medical forces and forbidden the students in her medical, engineering and other technical schools to enlist, she would not now be frantically urging the United States to send 3,000 doctors and almost as many trained mechanical engineers to the battle front in France.

SAFEGUARDING MEDICAL PRACTICES OF THE DOCTORS WHO ENLIST

Nearly every county medical society in Indiana will be called on to adopt some measure for safeguarding the practices of those members who through patriotic motives enlist in the service of the country. To such we commend the Maryland plan or some modification of it, as outlined in the news note recently appearing in *The Journal of the A. M. A.*, under the title "Punishing Patriotism: A Suggested Method of Meeting This Evil." The article as it appears is as follows:

Undoubtedly in the past civilian doctors who have been patriotic and who have served their country in the army and navy have been in a measure punished for such service by finding their practice dissipated and gone on their return home. The knowledge of this has naturally acted in preventing many a physician entering the Officers' Reserve Corps of the United States at this time.

To meet this situation the Maryland State Committee on Medical Preparedness, of which Dr. Gordon Wilson, Baltimore, is secretary, has devised the following plan to be presented at the annual meeting

of the state society (Medical and Chirurgical Faculty) to be held in April.

This plan already has been endorsed by the Baltimore City Medical Society.

The committee proposes to have offered the following resolutions:

1. *Resolved*, That the Medical and Chirurgical Faculty of Maryland recognizes the patriotism of those members of the medical profession resident in Maryland who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one third of the fees collected from such patients to the physician in active service or to his family.

2. *Resolved*, That the secretary of the society shall have prepared letter blanks according to the form attached, to a number sufficient to supply those physicians who are called into active service, with a sufficient number so that they can send a filled-out form letter to each patient, a carbon copy going to the doctor who has agreed to look after the physician's practice, and a second carbon copy to be sent to the secretary of the state society.

The secretary of the state society is instructed to file the carbon copies received by him, and on notification by a physician that he has terminated his service with the government and has resumed his practice, the secretary of the state society shall then send out to each of the patients of this physician whose names and addresses he has received in the filed letters a letter stating that the physician has resumed the practice of medicine, and requesting the patient in the name of the society to recognize the physician's patriotism by summoning him should he be in need of medical attention.

This method is the only one devised which can in any way meet the situation that confronts the physician who is patriotic, and who is penalized for his patriotism by the loss of his practice. By this method the profession at large is "put on its honor," the patients of the physician are urged to retain his services, and this urging is done, not in the physician's name, but in the name of the profession and as a patriotic duty.

It is proposed, should these resolutions be adopted, to send a description of the plan to every member of the profession, a copy of the form letter, and also two cards, one to be signed by the physician endorsing personally the first resolution, and the other an application for admission to the Medical Officers' Reserve Corps.

Below are specimens of the proposed form letter and two cards.

PROPOSED FORM LETTER

(Regular letter-head of Medical and Chirurgical Faculty)

M.....

Street.....

Postoffice.....

Dear M.....: As a member of the Reserve Corps of the United States Army (Navy) I have been ordered into active service by the government, and on that account I am writing to you of this fact, so that, in case of illness, you may summon some other doctor to attend you. In my absence Dr..... of, Telephone No....., has kindly consented to attend my patients, and I can heartily recommend him.

Sincerely,

.....

RESOLUTION ADOPTED BY MEDICAL AND CHIRURGICAL
FACULTY OF MARYLAND

Resolved, That the Medical and Chirurgical Faculty of Maryland recognizes the patriotism of those members of the medical profession resident in Maryland who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one third of the fees collected from such patients to the physician in active service or to his family.

Please present this letter to any doctor whom you may call in to attend you.

CARDS

I agree to abide by resolution adopted in relation to fees for attendance on patients of doctors ordered into active service for the government.

In the remote chance of misunderstandings or disagreements arising under this resolution I agree to submit the facts to the Board of Censors of the society and abide by their decision.

(Signed)

RESERVE CORPS

I hereby make application for appointment to membership in Reserve Corps of U. S. Army. (Scratch one Navy. out)

Date.....

(Signed)

Address

CONSERVATION OF FOOD

We thought that the cry "raise more food" to supply the warring nations would bring forth a retort from the farmer, who already is having his troubles in producing enough food to supply ordinary demands, and we were not wrong in our surmises. The president of a large association of farmers has come out with a statement to the effect that the farmer, on account of labor shortage, cannot harvest all of the crops that are planted during normal times, and at the present time, with thousands of farmer boys answering the call for recruits and no indication that their places are to be taken by others, it is the height of absurdity to ask the farmer to raise more food. We predict that the government will be obliged to draft men for work on the farms, just as men are drafted for service in the army, if the food proposition is to receive the consideration that it deserves.

For many years boys have been leaving the farms and going to the cities where oftentimes they earn less money but where life presumably offers attractions that offset any reduction in the income. In consequence the farmers have had great difficulty in securing help, particularly in emergencies as when the crops are to be

harvested. The farmer has seen the prices of his products increased until he is making more money than he ever made before in his life, but in spite of this he is encountering greater difficulties in obtaining the products on which his prosperity depends. Improved and lower-priced machinery has helped out to a large extent, but there still remains the necessity for manual labor, with a diminution of the number of those who can supply that labor. In times like these, when every acre of producing ground should be used to help make up an alarming deficiency in the world's foodstuffs, this serious handicap of the farmer becomes a matter that will require something more than frantic pleas to "raise more food." If in war times men cannot be coaxed to till the soil, then they should be compelled to do so. On the other hand, the farmer should not be forced to dispose of his products at one price and the consumer forced to pay from three to ten times as much for that same product, all for the profit of avaricious middlemen. Some governmental means should be adopted to cut out the enormous expense that occurs in getting foodstuffs from the producer to the consumer. The farmer deserves criticism for his desire to be shown some consideration that is not shown to others, but, on the other hand, he deserves assistance in enabling him to produce more and under better conditions, with corresponding profit to himself. And this is particularly true as it relates to the question of farm labor and a revision of the methods of getting farm produce into the hands of the consumer.

Along with this demand for more food is a demand for the conservation of food, and here the medical profession can be of great service in teaching the people how to economize in the use of food. At present there is not only a shameful waste of food products, but there is an utter disregard of scientific and sanitary rules of preparing food, and but little attention is paid to food values and the kind and amount of food required to maintain health. Most people eat too much, and few pay any attention to a well-balanced diet. There is need of much education of the public on the subject of food nutrition, and the kind and quantity of food that is best adapted to the preservation of health while at the same time effecting an economic saving, and to the medical profession will fall this duty.

In effecting economy in the purchase of food, the housewife can accomplish much by cutting out the expensive canned goods and the foods put up in fancy packages for which the con-

sumer pays enormous profit. Many may have forgotten, and others never have learned, the old-fashioned way of preserving as well as serving meats, vegetables, and fruits, but the old-fashioned ways are economical, and insure cleanliness and wholesomeness which are not found in some of the high priced prepared foods that are on the market today.

The solution of our food problem is not only to produce more food, but to save more food that now goes into the garbage can or is not used to the greatest economic advantage.

GROUP INSURANCE FOR MEDICAL MEN

In the April number of *THE JOURNAL* we called attention to "group insurance" for medical men as proposed by the Aetna Life Insurance Company of Hartford, Connecticut. Since the announcement we have investigated the subject and conferred with one of the representatives of the Aetna Life Insurance Company, and the proposition open for consideration, as we understand it, is as follows:

The group insurance plan as offered will insure all of the members of the Indiana State Medical Association under one policy, *without* medical examination. As proposed, every member of the Indiana State Medical Association will be expected to accept and pay for insurance ranging from \$100 to \$5,000, depending on what amount of insurance the member thinks he can afford to carry, at a rate that is less than the rate charged ordinarily for dependable insurance. The rate is based on the average age of the entire membership. For instance, if the average age of the membership of the Indiana State Medical Association is 40 years, the rate to be charged for the insurance will be \$7.14 per thousand per year. Without addition to the membership this rate gradually increases each year, but as near as we can estimate it, never reaches the cost of ordinary straight life non-participating old line insurance, though it offers all of the elements of safety and protection found in any life insurance. The policy is issued without medical examination of any members of the group, but the continuance of insurance for any member of the group is contingent on membership in the Indiana State Medical Association in addition to the payment of the premium charged by the insurance company for the amount of insurance carried by that individual member.

While the plan contemplates the issuing of but one policy covering the entire membership of the Association, it provides for the introduction of new members at any time, and for the discontinuance of insurance on any one member when he fails to keep up his membership in the Association, and also fails to pay his insurance premiums. Each policy is accompanied with a card file which is made a part of the insurance agreement, each card describing the insurance on a member's life; and when new members are added to the list of the insured, new cards are issued. Each member of the insured group receives a certificate indicating the amount of his insurance, and this certificate virtually constitutes a one year term renewable non-participating policy. At the death of one of the insured, the amount of the individual policy, represented by the individual certificate issued, is paid to the deceased's family or any other beneficiary.

We are informed that group insurance is written at rates considerably lower than can be granted for individual policies, for the reason that such business is held together by the group and is not subject to the individual interest or caprice of the insured, either regarding the initial insurance or the lapses which are so expensive a feature of individual insurance. The insurance is essentially one year renewable term insurance, non-participating, and although the premium on the individual lives increases each year slightly with the increased age of the insured, the total premium under the group plan policy will not be likely to vary accordingly, because the average age of all the insured remains practically the same. The reason for this is that the older men of the group are retiring or are lost through death, and their positions are filled by younger men, thus keeping down the average ages on which the rate depends.

To secure this form of insurance, the entire membership of the Association must be included in the plan. This is necessary in order to secure risks of average longevity. If only a portion of the membership were to be insured under such a policy, and no opportunity given for choice of individuals, the company naturally would get too large a proportion of the poorer risks, while some of the better would not be included, and an under-average group would be the result.

At first glance it might seem that the issuance of this insurance without examination would be unreasonable and at the same time unjust, and yet the representatives of the company say that experience has shown that by the group plan the general average is what decides the question

for the whole, and the fact that this group plan has been in operation for many years, and that a very low rate of insurance has been charged, is quite sufficient to prove the success of the plan. Furthermore, as the responsibility of the Aetna Life Insurance Company for all obligations assumed is beyond question, there is no reason why our Association should not at least give this plan consideration. Probably no member of the Association is without life insurance, as it also is very probable that there are few members who would not take more insurance under favorable conditions. To all of the members of our Association, irrespective of physical unfitness, this group plan of insurance offers an opportunity to secure life insurance at a cost that is less than that charged for any other trustworthy insurance that can be obtained, and the proposition should be of sufficient interest to warrant consideration. We believe that the plan can be put into operation without any change in either the Constitution or By-Laws of our Association, as we have been given to understand that there is no responsibility attaching to the Association as an Association, and that obligation of the company depends on the maintenance of a certain definite number of individual contracts representing the general average of risks in the Association.

SUPPRESSION OF UNNECESSARY NOISES IN HOSPITALS

Much has been written about the suppression of unnecessary noises outside of hospitals, and in many cities the police departments have established what are known as "zones of silence" in the vicinity of hospitals. In these "zones of silence" it is a punishable offence for street cars to ring their gongs loudly, automobiles to run with exhausts open or with clanging of horns or Klaxons, and even the huckster is forbidden to call out his wares. Even the barking dog and the fellow who runs his lawnmower at 5 o'clock in the morning, if within these silence zones, are objects for punishment.

This is all very well and quite in keeping with common sense, but a good deal may be said about the suppression of unnecessary noises within the hospital itself. How often do we hear hospital patients say that they are dreadfully annoyed by slamming doors, creaking elevators, loud call-bells, giggling nurses, and the inevitable phonograph found in most hospitals! Then there are some visitors who, with total dis-

regard for all of the proprieties of a hospital and the comfort of patients, persist in loud talking and laughing in the halls and corridors and in the rooms of convalescents. Even some doctors are known to use little judgment in making unnecessary noise when visiting patients in the hospital, and they set a bad example to nurses and others when they fail to move about quietly and modulate the voice when speaking.

Much can be accomplished through the tactfulness of a first class hospital superintendent who makes an honest endeavor to suppress these unnecessary noises. The nurses can be reprimanded or even discharged for infraction of the rules, and the ever-present phonograph or other musical instruments can be transferred to the convalescent department or even kept out of the hospital altogether; but the visitors, and occasionally the doctors, must be reminded that quiet in a hospital is imperative for the comfort and best interests of many patients. That there is room for great improvement in this matter of the suppression of unnecessary noises within the hospital is unquestioned, and the superintendents of hospitals will be doing a real service if they give the matter due consideration.

DOCTORS DEFEND SWINDLE

The Journal of the A. M. A. of March 24, in commenting on the fraud order issued by the Postoffice Department against sargol, "the get fat quick" nostrum, the promoters of which were recently found guilty of fraud and fined \$30,000 after promising that the business would be discontinued, has the following to say concerning expert testimony:

Of course the Sargol Company had no difficulty in producing "experts" to uphold its claims. There never was a medical swindle so preposterous that members of the medical profession could not be hired to defend it. The Sargol case recalls the disgraceful state of affairs that was disclosed at the Wine of Cardui trial when the American Medical Association was put on the defensive because of its activities in attempting to protect the public from medical humbug. In that trial the "patent medicine" interests were able to employ members and Fellows of the American Medical Association who not only lent aid and comfort to the enemies of the public health but attempted to discredit the testimony of decent physicians who belonged to the same organization of which these persons were members.

So in the Sargol case we find appearing in defense of this outrageous fraud physicians who, by virtue of their membership in their county and state societies, were enabled to become Fellows of the American Medical Association. They were:

Ernest Ellsworth Smith, M.D., New York City.—Member of the New York Medical Society, member of the Medical Society of the State of New York.

Howard L. Davenport, M.D., Auburn, N. Y.—Member of the Cayuga County Medical Society, member of the Medical Society of the State of New York.

Michael P. Conway, M.D., Auburn, N. Y.—Member of the Cayuga County Medical Society, member of the Medical Society of the State of New York.

Gibson Benjamin Mack, M.D., Auburn, N. Y.—Member of the Cayuga County Medical Society, member of the Medical Society of the State of New York.

The Sargol case has many points of interest to the profession. For some years the Propaganda Department of *The Journal* has been receiving letters from physicians calling attention to Sargol and asking why it was possible for such an obvious swindle to be perpetrated year after year, and no action be taken. The facts in the Sargol trial answer this question. The postal authorities went to great trouble to collect evidence for the purpose of protecting the public against this fraud. The trial lasted many weeks and is said to have cost the United States more than \$100,000. Although the business was palpably fraudulent, although the claims made for the nostrum were patently false, the defendants were able to employ physicians, who held membership in their local societies and, through that membership, fellowship in the American Medical Association, to go on the stand and swear that Sargol was a "flesh builder" and "bust developer"! Is it any wonder when such conditions obtain within the medical profession that officials whose duty it is to protect the public against fraud hesitate to attack humbugs of a medical nature? Medical fraud flourishes not only because of the credulity of the public, but also because of the low ideals or the venality of a few members of the medical profession.

We fail to understand why any medical society making claims for decency in its membership should be obliged to retain on its membership rolls the names of men who not only are a disgrace to the medical profession, but are a positive detriment to those organizations that are endeavoring to create and maintain a high standard of ethics in the practice of medicine. It brings to our mind the argument oftentimes made that we are too zealous in securing numbers rather than quality in our county medical societies.

GARRULOUS DOCTORS' WIVES

An Indiana doctor is in trouble as a result of the garrulousness of his wife. Either through carelessness or through intent to convey a little news the doctor informed his wife that a woman, an acquaintance of the family, probably was suffering from syphilis. The doctor's wife, not possessing the requisite amount of discretion in talking about her husband's patients, conveyed the news to a woman friend, and in that manner it was conveyed to other women, each

time with certain embellishments, until finally all of the people of the small town where the episode occurred were made acquainted with the news, and much made of it by certain scandal-loving women. Finally the husband of the woman who had been maligned heard the news, and, being of an investigating turn of mind as well as possessing a pugnacious spirit, traced the story to its fountain source, and then proceeded to soundly thrash the doctor for having provided his wife with professional views concerning one of his patients. The interesting phase of the situation was that the doctor had to admit that even his own suspicions were unfounded, as the Wassermann test proved negative and even the lesion itself was definitely proved to be of an origin not syphilitic in nature.

However, the incident is not without its lesson. There are altogether too many doctors' wives who know altogether too much about their husbands' business and the nature of the ailments their husbands are called on to treat, and there are altogether too many of these same doctors' wives who talk too much concerning what they know. On the other hand, there are a great many persons, and especially women, who possess an over-abundance of curiosity which they desire to have gratified, and which they do gratify frequently by catechising some doctor's wife concerning the nature of ailments of their acquaintances. Many a doctor has been practically ruined through the garrulousness of his wife, but in nearly every such instance the doctor can blame himself, for had he refrained from taking his wife into his confidence he could have been saved from embarrassment. In the practice of medicine a doctor discovers a great many facts that should be considered as confidential knowledge, not to be imparted to others; and a patient in placing himself or herself in the hands of a physician bestows a confidence that under no consideration should be betrayed. It may seem a natural thing for a man to confide in his wife, but the doctor has no legal or moral right to confide in a wife when it means the betrayal of the confidence of some patient. If perchance the doctor's wife does obtain professional secrets, she ought to have the good sense to keep such information to herself, not alone as a protection to the patient who has confided in the doctor, but as a matter of justice and protection for the doctor himself. Quoting the words of a doctor of the old school, "The doctor who has a garrulous wife ought to muzzle her, and if he cannot muzzle her, then he ought to get rid of her."

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

COMPULSORY health insurance is a treacherous proposition and the medical profession will be wise if it voices disapproval.

WHY do some physicians continue to prescribe sodium cacodylate on the theory that it cures syphilis? Numerous investigators have pronounced sodium cacodylate worthless and, therefore, useless as a spirocheticide. Hence, it should not be used in the treatment of syphilis.

COLORADO and Tennessee have been added to the list of those states prohibiting fee splitting. The Colorado legislature has passed the bill which prohibits the division of fees by physicians, surgeons, chiropractors, midwives or chiroprodists. The next thing in order is to enforce these laws. The lamentable fact is that such laws should be necessary.

DURING April the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Abbott Laboratories: Parresine.

Howard-Holt Co.: Siomine.

Lehn & Fink: Aspirin, L. & F.

E. R. Squibb & Sons: Acetylsalicylic Acid, Squibb.

General Chemical Co.: Sofos.

IN the correspondence department of this number of THE JOURNAL will be found a letter from Dr. Joseph Rilus Eastman, recently returned from extended service at a military hospital in Vienna where he acted as chief surgeon. The letter is interesting from the fact that it points out what many have believed, namely,

that the German people are not as hard pressed for food as is generally supposed, and are not discouraged as to the ultimate outcome of the war.

IT is surprising how many men can buy new automobiles for pleasure, and pay cash for them, but cannot raise enough money to pay their doctor bills. Furthermore, it is surprising how complacently the members of the medical profession accept that condition of affairs. The doctor's worst enemies are those who owe him, and those who owe the doctor the longest and are extended the greatest leniency are the ones who are most vicious in their enmity. Why do doctors not learn a lesson from this?

INDIANA probably will send a good delegation to the annual session of the American Medical Association to be held in New York, June 4 to 8, 1917. Not only will the scientific programs of the various sections prove interesting, but an added feature will be the many and varied clinics arranged for at the numerous New York hospitals. A great many physicians will take advantage of this latter feature, as it offers an opportunity to observe the latest and most approved work. While the distinctly scientific programs are confined to June 4 to 8, yet there will be special clinics the week preceding and the week following the session of the Association.

IT is reported that the Washington State Supreme Court has ruled that an injured workman receiving compensation from an industrial insurance association has no further recourse for damage as a result of his injuries. This ruling has had the effect of putting a stop to malpractice suits against physicians by injured workmen. If the ruling of the Washington Supreme Court is to have any bearing in Indiana it will be good news to Indiana doctors who are now the only ones left for injured workmen to sue, the Workmen's Compensation Act having made it impossible for legal action to be taken against either employers of labor or the insurance companies.

THE baking-powder controversy shows the lengths to which well entrenched interests will go to carry their point and stamp out competition. The fact that competent and trustworthy chemists have pronounced a baking power not made by the trust as efficient, economic and healthful, and that the advertising of such baking powder is accepted by a large number of medical journals that will not accept the adver-

tising of anything that is not approved as being what it is represented, should indicate to thoughtful persons that the baking powder trust is not quite right in the assertions that every product which it does not make or control is worthless and harmful as an accessory to the production of food.

It has been the aim of the Association and of the constituent societies to offer every inducement for members to pay in advance. In spite of the fact, however, that the member loses his good standing after February 1, and also loses his right to participate in the medical defense feature, there are always three to four hundred members delinquent on February 1. The St. Joseph County Medical Society recently has adopted a rule that will bring still greater pressure to bear on a prospective delinquent. A member of that society who fails to pay his dues must, in addition to paying all back dues and assessments, have his name presented before the society and receive a two-thirds vote of the members present if he wishes to be reinstated.

DR. OREN O'NEAL, the notorious quack eye doctor of Chicago, so ruthlessly exposed by Samuel Hopkins Adams in his series of articles on *The Great American Fraud*, is in the limelight again as the probable owner of a mail order fraud home treatment for pyorrhea, known as the Willard Pyorrhea Treatment, which, according to the federal inspectors, seems to have netted the owners \$75,000 per year. O'Neal is the charlatan of whom Mr. Adams says: "If I were organizing an institute of quack specialists I would select Dr. Oren O'Neal of Chicago as first president." Once a quack, always a quack, is a statement requiring little proof. From one species of graft the charlatans, like O'Neal and his ilk, shift to another whenever it is the part of discretion to do so.

THE officials in charge of the enforcement of the Federal Food and Drugs Act are calling attention to the adulteration of certain drugs and to the inferior quality of others due to the use of inferior medicinal herbs and roots. They also could have called attention to the fact that medicinal herbs, roots and leaves of an inferior quality find a ready sale among a certain class of pharmaceutical manufacturers who do a thriving business with doctors and druggists who put price ahead of quality. It doesn't pay to buy cheap drugs, and we might go further

and say that it doesn't pay to trade with small concerns having little capital and making little pretense to do anything else than sell their products at prices considerable less than those of established and reliable pharmaceutical manufacturers. The best, even though it costs a little more, is the cheapest in the long run.

THE American Medical Association meets in New York City, June 4 to 8, 1917. The papers for the various sections, titles of which have already been published (*Journal A. M. A.*, May 5, 1917) indicate that the scientific work will be of exceptional merit. Aside from this, New York offers unusual clinical facilities, and a large attendance is promised on that account alone. Inasmuch as the Association has met but three times in New York City, the first time in 1853, when the Association was born, again in 1864, and the last time in 1880, or thirty-seven years ago, there is ample opportunity for the New York men to make up for previous apathy and to show what they can do for the greatest medical association on earth. A feature that will prove of interest will be the demonstration of a field hospital unit in which the practical equipment for such a unit will be available for inspection and study, as provided by the local committee on arrangements.

THE price of drugs and chemicals continues to soar, to say nothing of having some of the drugs and chemicals go off the market entirely. Hospital supplies have advanced in price rapidly during the past thirty days, and the end is not yet! Some manufacturers of surgical and hospital supplies have been notified to hold their output, subject to federal orders. Others are anticipating such orders. Not a few of the manufacturers and dealers are taking advantage of the situation by unnecessarily boosting prices. In the meantime, the hospitals and the medical men of this country are suffering in consequence of this great increase in the cost of necessities for carrying on their work. The worst feature of it is that they think they cannot, or at least do not try to increase their own incomes by charging more for their services. The services of every one but those connected with the medical profession are commanding more remuneration, but the doctor, with few exceptions, trudges along in the same old groove at the same remuneration he received when potatoes were 20 cents a bushel instead of \$3.80 per bushel as at present, and everything else in proportion.

LET no one think that this war into which we are plunged is to be a tame affair or short lived. There are many signs which indicate that the United States has been plunged into a conflict that will tax the resources of the nation as they never before have been taxed, and officialdom seems to appreciate the actual condition of affairs and to be acting accordingly. Preparations on a gigantic scale are under way, and the preparations are with a view of a prolonged and expensive war. The people should face the situation in its reality and each one determine to do his part. It is not necessary for everyone to go to the front, but it is necessary for everyone to do something to contribute to the cause. This is nowhere more necessary than in the medical field, and every doctor, both young and old, will be called on to make sacrifices of one kind or another for the country's good. We feel safe in saying that no member of the regular medical profession will shirk duty. Each, however, should be given work to do that he is most capable of performing.

THE medical colleges of the United States have received federal notification to the effect that medical students be advised not to enlist at the present time, but to continue their medical studies with the distinct object in view of joining the army or navy medical service later when more medical officers will be required than are available at the present time. This is conservation of our sources of supply in medical men, and is a move in the right direction brought about through a realization of the mistakes made by England, where, in the first enthusiasm at the outbreak of the war, medical students and members of the faculties of medical schools were not only permitted but urged to enlist in the ranks or in the various hospital organizations, with the ultimate result of disorganization of the medical schools and, later, failure to supply young medical men to fill positions created by the increasing army and the vacancies caused by death. Our government, therefore, has recommended that the medical schools be kept operating, even without the customary vacation periods, so that the increasing shortage of medical men in the nation's service may be overcome.

THAT it pays to be the President's physician and golf companion is evidenced by the confirmation of Dr. Cary T. Grayson's appointment by President Wilson to the position of Rear Admiral of the United States Navy. With all due respect to Dr. Grayson, and with full

acknowledgment of the fact that he is quite competent to fill the position to which he has been boosted by the appreciative President, we doubt the propriety of crowding a young man ahead of men longer in the service and in line of promotion and considered even more capable of filling the position creditably. There isn't much satisfaction in enlisting in the army or navy service of the United States if promotion is to go to favorites, and if those in line of promotion through years of service, competency and efficiency are to be utterly ignored. If Dr. Grayson had done something to merit this promotion there would be room for no comment, but it hardly seems justifiable to give a man such a tremendous boost, and over the heads of many others, simply because he happens to be an agreeable golf companion of the President.

YE GODS AND LITTLE FISHES! Isn't it quite bad enough to have lay members on boards of health without having a layman as health commissioner, and — worst of all — that layman a Christian Scientist! *Colorado Medicine* is authority for the statement that the city of Denver has a Christian Scientist as a health commissioner. We wonder if he will distribute copies of Mrs. Eddy's book, the bible of the Christian Scientist, to Denver's sick and afflicted, and when scarlet fever, diphtheria, smallpox, or any other communicable disease breaks out, he will refuse to quarantine the patients on the Christian Science notion that the patients are not sick but suffering from an error of the mind. We also wonder if the various well-established health regulations, known to be absolutely necessary for the safeguarding of public health interests will be abrogated. It may be that the appointment of a Christian Scientist as a health commissioner is a political reward without regard for either consistency or efficiency, but what kind of a penalty will Denver pay if the Christian Science health commissioner lives up to his religion?

THE anti-prohibition forces are making strenuous efforts to tide over the inevitable legislation that will put the booze business out of commission. From the number of books, pamphlets and newspaper advertisements that are appearing, it is evident that an enormous amount of money is being spent, but to any thinking person it is apparent that this lavish expenditure of money is wasted effort. The interesting feature to physicians is the long delayed argument now put forth by the liquor dealers that if prohibition is to prevail why not put patent medi-

cines off the market, for, as pointed out by the anti-prohibition manual, with the unregulated sale of Hostetter's Stomach Bitters containing nearly 45 per cent. of alcohol by volume, and a large number of other patent medicines and so-called tonics containing large amounts of alcohol, the steady drinker will have no difficulty in obtaining booze. Furthermore, it is a question if the brewers and distillers will not see a way out of their difficulty in the possibilities offered through the origination of new patent medicines, each having a large alcoholic content. In short, no prohibition law is going to be effective unless it wipes out the iniquitous patent medicine industry, for already the sale of patent medicines in dry territory has increased enormously.

IN the present national emergency, state boards of medical examiners are in position to render a positive service. They should make it clear—and several have done so—that the graduation of high-grade senior students one or two months earlier than usual will not be permitted to count against such graduates when they later apply for license to practice medicine. Such students, following graduation, are to be immediately enrolled in active military medical training, either for the Army or Navy Medical Service. Such training should be acceptable to all state boards as the full equivalent of the work which otherwise would have been obtained in the medical school. Some states also have rules against the giving of continuous sessions by medical schools, and these rules should be altered should the demand for medical officers become urgent. By beginning the next session soon after the close of the present session, medical colleges could graduate the present third year or junior students in January or February, 1918. Students graduated under such an arrangement in a national emergency should not be penalized when they later apply for licenses.—*Monthly Bulletin of Federation of State Medical Boards of the United States.*

THE Michigan State Medical Society has adopted a plan whereby the society assumes the obligation for the care and protection of the families and dependents of the members who enter into actual war service for the United States. The Society has made an initial assessment of \$5.00 per member which will furnish an emergency fund, and the Council has been authorized to make as many assessments as may be found necessary to carry out the plan contemplated. Each county medical society in Michigan will appoint a "Patriotic Committee"

who will file monthly reports with the secretary of the State Society upon the question of financial and social conditions pertaining to the family or dependents of each doctor of that community who is serving his country. The Michigan State Medical Society has thus announced to every enlisted doctor that his state medical society is back of him, and that his family and his dependents will not be permitted to suffer or be in want, or accept charity from any other source. The Society also has given assurance that upon the return of any enlisted doctor and the assuming of his practice, that he will have the help and influence of the State Society in the reconstruction of his practice. This action is commendable in every way, but to enlisted doctors the plan whereby their practices are not only taken care of by their confreres, but a portion of the proceeds turned over to the enlisted doctors' families and dependents, is more satisfactory, though it is a good idea to combine with it the Michigan plan as a supplement.

THE Bureau of Foreign and Domestic Commerce of the Department of Commerce, recently has issued a bulletin to the effect that China soon will be the greatest market in the world for proprietary medicines, and calling attention of American manufacturers to the advantages of getting a good foothold in the market at once. The report states that hygiene is practically unknown among the Chinese, and the sickness and suffering to which the masses are subject on account of the lack of efficient native remedies or treatment is probably greater than in any other country. Ten years ago the proprietary medicine trade in China was so small as to be scarcely worth mentioning, but through judicious and persistent advertising, the natives are gradually being educated "to the necessity of paying some intelligent attention to their ailments and are responding remarkably well. For this reason it is not difficult to introduce a good article at a reasonable price, if supported by the right kind of advertising." It seems to us that the government of the United States, instead of furthering the sale of proprietary medicines in China, should extend medical education by helping medical missionaries, hospitals and medical schools. There is no good reason why China should be burdened with proprietary remedies and patent medicines which have gotten a foothold in our United States and are a menace to the lives of our American people, when there are such broad opportunities to assist in the advancement of medical science which alone makes for the betterment of the health and hygienic conditions of the Chinese people.

WE have heard a good deal about German *Kultur*, and much boasting has been indulged in concerning its beneficent influence, but we pause to inquire if it was German *Kultur* that led to the breaking of the treaty with Belgium and the ravaging of Belgian territory, and later the subjection of a good portion of the Belgian people to slavery? Is it German *Kultur* that led to the ruthless submarine warfare, with no respects for the rights of any nations? Is it German *Kultur* that led to repeated firing on Red Cross ambulances, Red Cross vessels and hospitals? Is it German *Kultur* that has led to the wilful destruction of cathedrals and priceless works of art; the barbaric desecration of churches, statuary and public buildings, and the burning of peasants' homes and the destruction of fruit and shade trees without the slightest justifiable reason? In other words, is it German *Kultur* that has led to the breaking of all of the laws of nations, the rights of individuals, and every moral obligation recognized by man? We do not believe for one minute that the bulk of the German people are responsible for these atrocities of barbaric nature except that they are driven to it by an ambitious, war-crazed, autocratic government, having visions of power and grandeur through conquest by despotic military methods. But we hope we have heard the last of the beneficence of German *Kultur*; as we also hope that when this world war ends, Democracy will be holding full sway in Germany, and the ill-advised people of that country will have come to their senses.

THE "United Doctors" bob up serenely in Indiana every once in a while, and other states fare no better, though it must be acknowledged that some states put these notorious quacks out of business about as quickly as they put in an appearance. In Ohio the State Medical Board revoked the license of the only licensed member of a group of three physicians who were operating in Ohio under the name of "The United Doctors," and the efficient Executive Secretary of the Ohio State Medical Association is conducting a campaign of education among newspapers to do away with the quack doctor advertising which in reality is the only thing that enables the quacks to flourish. One of the Ohio newspapers, in commenting editorially upon the "United Doctors" and their visits to various communities, offers the following pertinent remarks: "It is always better to patronize your home physicians, as they are here to help build up our community, paying taxes here, helping sustain our churches and all that goes to make

our town a desirable place to live. Moreover, they are always here and have to abide the consequences of their treatment of patients should anything go wrong." It is suggested by the *Ohio State Medical Journal*, and we endorse the same, that physicians can render their community a service by explaining to their editors the methods pursued by traveling quacks. Editors as a class are very decent citizens who are interested directly in the welfare of their respective communities, and while now and then an editor will be found who is looking for the "almighty dollar" and does not care particularly how he gets it, yet, on the whole, editors can be made to see the light if they are approached in the proper spirit and the damage arising from the furtherance of the methods and practices of quack doctors is pointed out to them.

ONE of the things that our Executive Secretary can do in his attempts to correct the shortcomings of the medical profession is to call attention to the great mistake made by so many doctors in patronizing irresponsible and untrustworthy pharmaceutical houses and manufacturers of physicians' supplies of every description. The competent and efficient physician must have pharmaceuticals and equipment of the best quality. We know that drugs and surgical instruments of poor quality are offered to the doctors of Indiana, and because of low price, these products of inferior quality are purchased rather freely. It does not speak well for the medical profession, and it certainly means failure to secure the best results for the suffering public. The doctor who wishes to do himself and his patients justice will have nothing to do with the firms that are offering cheap and trashy goods. Incidentally, we may say that some firms of that character have attempted to secure advertising space in *THE JOURNAL*, and have been refused. We are carrying the advertising of firms that we have every reason to believe are doing business on an ethical basis and making quality the object of first consideration. If any reader of *THE JOURNAL* will call our attention to and furnish evidence of a single instance where one of our advertisers has made any misrepresentation of any kind whatsoever concerning quality of goods or prices, we will ask such advertiser to make good or suffer the penalty of having the advertising thrown out of *THE JOURNAL*. But of what use is this stand unless we are backed up in it by the members of the Association, and the only way that co-operation is secured is through patronage of the advertisers.

AFTER referring to a bill introduced in the Texas Legislature which aims to remove chiropractors from the jurisdiction of the medical practice act and to provide for them lower educational standards, the *Texas State Journal of Medicine* for February gives the following "broadside" against chiropractors:

1. Chiropractors have no schools of such grade as to fit them for taking examinations of the State Board of Medical Examiners.

2. Chiropractors who have been practicing in Texas for one year have done so in defiance of the law.

3. Chiropractors are uneducated osteopaths, confining their treatment to the spine, using a kind of modified osteopathic "stroke" and denying all causes of disease outside of impinged nerves.

4. Chiropractors deny germ and malignant origins of disease. They treat indifferently colds, asthma, consumption, cancer, smallpox, meningitis and every disease by "spinal adjustment."

5. The best of chiropractors can be but ignorant enthusiasts. From the standpoint of the people, they are dangerous, a menace to life and health, calculated to prey on the pockets as well as the physical well-being of the public.

6. The passage of this bill opens the way for the entrance into medical practice of all drugless healers and encourages every sort of pseudo-medical sect to secure a board.

7. The Chiropractic Bill, if passed, would probably render impossible the conviction of drugless healers for violation of the medical practice act, as it repeals a part or all of the definition of the practice of medicine in Section 13 of the present law and possibly the courts would decide that it destroyed the entire practice act, as it violates the principle of a single standard for all medical practice.—*Monthly Bulletin Federation of State Medical Boards of the United States.*

INDIANA physicians may be a little inactive and apathetic when it comes to medical legislation, but they are not quite so much so as the medical men of Oregon, who, without an objection from them, have permitted a law to be enacted which permits osteopaths to practice surgery, administer anesthetics and dispense narcotics. After approving the bill the governor replied to a protest from the secretary of the State Board of Health that he had signed the bill "as no protest whatever was made." This reminds us that osteopathy has had a stimulant in Michigan through the decision of a Detroit jury that an osteopath may practice major surgery without violation of the medical practice act of that state. The strange feature in this whole controversy over the right to practice medicine is that so little attention is given to the question of qualifications and what constitutes qualifications for the practice of medicine in all its branches. If judges, juries, and

the people at large will get it into their heads that it is not osteopathy, chiropractic, neuropathy, or any other cult seeking the privilege of caring for the sick and injured in any way deemed necessary, that are being arraigned, but that it is purely a question of incompetency, we think better returns could be secured. The great plea of the members of these cults is that they are being persecuted instead of prosecuted, and the plea certainly has its weight with the sentimental public who is always eager to help the "under dog." The fight should be made on the ground of qualifications, and qualifications for the practice of medicine means a certain amount of study and training, and you can give it any name you wish when you have had enough of it. To permit osteopaths, who have had little or no training in all that goes to make up a competent surgeon, to practice surgery or to permit him to prescribe drugs when he has had no instruction in materia medica and knows little or nothing about the use of drugs, is criminal. Of course it is inconsistent on the part of osteopaths to make any claims for knowledge of these branches of medical practice, in view of their published statements as to what constitutes a knowledge of their profession, but a little matter of that kind is of little concern to them.

MUCH may be said in opposition to compulsory health insurance, and the reasons advanced by a contributor to *The Journal A. M. A.* are pertinent. Among these we find the following:

Because it would reduce the rank and file of a learned and respected profession to the level of wage earners.

Because it is nothing more or less than lodge or contract practice on a universal scale, and this has proved by experience to be an unmitigated evil; unsatisfactory from the standpoint of both physician and patient.

Because the problems that have given rise to the agitation for compulsory health insurance are not medical problems at all, but purely economic ones, and with a living wage paid by employers to the workers they will be satisfied, and in a position to pay their own bills, medical and otherwise, without aid from the state or any other source.

Because the rank and file of the medical profession, reduced from an independent position to the condition of employees working for a corporation, would be as underpaid and dissatisfied as are other wage earners, and this state of affairs would not conduce to the advancement of medicine or redound to the benefit of those under their care.

Because the healthy rivalry now existing among physicians to give increasingly efficient service to their patients in order to gain and to hold practice would cease, as no physician would gain anything by increasing his efficiency.

Because it would enslave, burden, and belittle all parties to it, especially the wage earner and the physician, would completely commercialize the latter, and ring the death knell of medicine as a humanitarian calling.

And finally, because nobody really wants it, it being a self-evident fact that, like everything else, cheapening medical service means lowering its quality, and no person in this country need suffer from lack of medical attention and care, as those too poor or too improvident to pay are at all times accommodated in hospitals or other institutions; and because compulsory health insurance does not in Europe, and cannot here, either prevent disease or accident or drive a lazy, malingering or chronically sick individual to work.

SHOULD PHYSICIANS TAKE VACATIONS?—Undoubtedly; Yes.—WHY? *First*—for rest. They need it both for body and mind. Other professional men—ministers, lawyers and teachers—take vacations. The duties of many of the professional men call them away from their local work. They obtain rest by change. But the physician's work is in the "round of his practice." If not varied, the physician's work may become a monotonous grind. Other professional men have their holidays; they have their evenings and Sundays. The physician has no day (not even Sunday), nor night, that he can call his own. Therefore every physician should plan to take a vacation to recuperate his physical and mental powers.

Second—He should take vacations for study; to visit centers and ascertain the latest developments in his own specialty.

Third—He owes a duty to his family and should plan periodically to devote time to social and domestic life.

Dr. D. W. Cathell in his treatise on "The Physician Himself," says: "Many busy physicians . . . foolishly postpone necessary relaxation . . . till from prolonged mental tension and physical strain, they become prime candidates for one or the other of the physician's two afflictions—organic heart disease or sclerosis of the cerebral arteries. A short rest will actually make you more philosophical and a better physician when you return to your books and to your duties among the sick. Recreation is Re-creation."

WHERE?—That depends on his means, his tastes, etc. Some prefer the quiet of the mountain or seaside resort. Some go fishing or hunting. Others go to the cities where they get the advantages of libraries, clinics, etc. There are desirable trips by water to Alaska, up the Hudson; on the Great Lakes. There are the Yosemite, Yellowstone Park, the National Glacier

Park, the Grand Canyon, the lakes of Michigan and Wisconsin; and the whole coast line, from Eastport, Me., to Tatoosh, Wash. Almost every state has its own watering places, or mountain resorts. This summer the American Medical Association Convention in New York City will be made the occasion of combining many of these features—the National Convention, the city, the seashore, the mountains, etc.

DEATHS

EMMA MCCOY, widow of the late Dr. L. H. McCoy of Richland, died April 20.

BENJAMIN F. FREEDMAN, M.D., died at his home in Ridgeville, March 30, aged 41 years.

SARAH ANN CANFIELD, wife of Dr. Moses S. Canfield of Frankfort, died April 9, aged 58 years.

HARRIET E. ALLEN, widow of the late Dr. Horace R. Allen, Sr., of Indianapolis, died April 23.

JOHN CASSIDY, M.D., South Bend, died April 5, aged 80 years. Dr. Cassidy was born in Chelsea, Michigan, May 21, 1837, and was a graduate of Rush Medical College, class of 1867.

HARRY M. LAMBERSON, M.D., former physician of Connersville, died April 29 at Colorado Springs, Colorado, where he had gone for his health. Tuberculosis was the cause of death.

THOMAS B. MORRIS, M.D., aged 68, died April 17 at his home at Mt. Zion, after an extended illness. He was a member of the Wells County Medical Society and the Indiana State Medical Association.

MARTHA E. KELLER, M.D., Indianapolis, was one of the victims of the fire, April 20, which destroyed the Colfax Building, in which her office was located. She was an active charity and temperance worker in Indianapolis.

ADONIRAM J. BANKER, M.D., Columbus, died April 23, from acute meningitis; aged 71 years. Dr. Banker was born in Butler County, Ohio, read medicine in the office of Dr. L. N. Comstock and son at Marietta, the office of Dr. J. B.

Little at Flatrock, attended the Ohio Medical College at Cincinnati, and graduated from the Indiana Medical College in 1876. He took post-graduate work at Bellevue Hospital, New York, and spent several months at the principal clinics in Europe. With the exception of three years spent in practice at Clifton, he has practiced continuously at Columbus. He had held the position of local surgeon for the Pennsylvania lines since 1880; established the Columbus Hospital in 1891; held the chair of obstetrics and the chair of surgery for a period in the Central Medical College of Indianapolis; was a member of the Indiana State Medical Association, the Obstetrical and Gynecological Society of Germany, and the International Tuberculosis Society. He served several terms as president of the Bartholomew County Medical Society and the Fourth District Medical Society.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

AN epidemic of smallpox has been reported at Indiana Harbor.

DR. F. M. DICKASON of Bluffton was married recently to Miss Evelyn Bergdoll.

DR. J. A. CRAIG of Gary has been very critically ill at the Gary General Hospital.

BETTER-BABIES WEEK, beginning May 1, was observed in Indianapolis by exhibits and clinics.

DR. DON HILDRUP of Windfall has resigned his position at the Epileptic Hospital at New-castle.

DR. WILL A. THOMPSON of Liberty was married Sunday, April 22, to Miss Nelle O'Toole.

DR. and MRS. L. C. CLINE of Indianapolis have returned from an extended stay in San Antonio, Texas.

DR. GEORGE E. REYNOLDS of Columbus is very much improved after a long illness on account of an eye trouble.

THOMAS J. FORD, 14-year-old son of Dr. W. M. Ford of Mt. Auburn, died April 20, from pneumonia.

THE contracts have been let for the building of a new addition to the good Samaritan Hospital at Vincennes.

THE legislature of the State of Missouri adjourned without passing any bills opposed by organized medicine.

THE semi-annual meeting of the Indiana State Nurses' Association was held at Crawfordsville April 12 and 13.

THE little son of Dr. Frank Kennedy of Goodland died April 4 at Chicago, where he had been taken for treatment.

DRS. L. A. BOLLING and C. G. BECKETT of Attica have received their commissions as members of the Reserve Corps.

DR. CHARLES D. HUMES of Indianapolis was reelected president of the Indianapolis Tennis Association at the April meeting.

DR. JAMES MONTGOMERY of Owensville recently underwent an operation for appendicitis at the Walker Sanitarium, Evansville.

DR. O. V. SCHUMAN of Columbia City has been appointed chairman of the Auxiliary Medical Defense Committee of Whitley County.

DR. JOHN K. MITCHELL, son of the late S. Weir Mitchell, died at his home in Philadelphia on April 10 of heart disease in his 57th year.

DR. J. W. WAY, who practiced medicine in Washington, Indiana, and surrounding territory sixteen years ago, died recently at Kremmlig, Colorado.

DR. T. C. KENNEDY of Indianapolis was the guest of the Henry County Medical Society at their meeting of April 10, and presented a paper on "Cancer."

DR. and MRS. E. D. MILLIS have returned to their home in Plainville after spending the winter in Florida. The doctor's health is somewhat improved.

THE Randolph County Medical Society met April 2 at Union City. Dr. Fred Ruby of Union City presented a paper on "The Bacteriology of the Tonsil."

KOSCIUSKO COUNTY physicians have organized the Kosciusko County Auxiliary Medical Defense Committee, with Dr. C. Norman Howard as chairman.

A PERMANENT Allen County Division of the National Defense League has been organized under the chairmanship of Dr. H. O. Brugge-man of Fort Wayne.

DR. O. P. FRANKS of Churubusco, who has been in ill health and spent much of the winter in the south, has returned home and his health is rapidly improving.

THE members of the Elkhart Academy of Medicine were the guests of Dr. C. W. Frink on April 18. Dr. Frink presented a paper on "Fracture of the Femur."

DR. M. M. PARSONS, formerly of Schnellville, has accepted a position on the medical and surgical staff of the Woodmere Asylum, Evansville, and has removed to that place.

DRS. CHESTER A. STAYTON and Don G. Hill-drup, who have been attending physicians at the Village for Epileptics, Newcastle, Indiana, have resigned, and will engage in general practice.

A HAY fever clinic has been opened at the Charity Hospital, New Orleans, La., by the American Hay Fever Prevention Association, for the prevention and treatment of hay fever.

DR. J. D. NUSBAUM of Indianapolis, who has served several years as health officer for Marion County, has resigned his office, and Dr. M. O. Devaney has been appointed to serve the remainder of the year.

DR. CHARLES C. GRANDY of Fort Wayne has been named assistant surgeon of the Pennsylvania Railroad Company in that city. Dr. Grandy will have charge of all Roentgen-ray work.

DR. L. W. SMITH of Wabash was severely injured in an automobile accident the latter part of April. His legs were so severely crushed that amputation was necessary. He has been putting up a fight for his life.

DR. D. M. REYNOLDS, formerly of Clayton, has removed to Danville, Indiana, where he will be associated with Dr. L. W. Armstrong, specializing diseases of the eye, ear, nose and throat.

DURING the two weeks ending April 7, one new case of typhus fever was reported at Laredo, Texas, making a total of 79 cases that have been reported on the border since July 1, 1916.

DR. JOSEPH RILUS EASTMAN of Indianapolis, who has been in charge of a hospital unit in Austria since June, 1916, arrived home April 24, after a hazardous trip across on a Standard Oil tanker.

DR. T. J. LAMBERT, who has spent the past four years in Union City, specializing in diseases of the eye, ear, nose and throat, has taken over a practice at Aurora, Illinois, and removed to that place.

DR. BRUCE HART, formerly of Round Lake, Minnesota, has purchased the practice of the late Dr. O. E. Metzger at South Whitley, and is occupying the Metzger offices. Dr. Hart is a graduate of Indiana University Medical School.

DR. JOHN OLIVER, Indianapolis, as director of the Lilly Base Hospital, is selecting the staff for the same. It will consist of twenty-three surgeons, two dentists, fifty graduate nurses and assistants and attendants, making 250 people in all.

DR. M. D. WILLCUTTS, formerly intern at the City Hospital, Indianapolis, went to Washington, D. C., in April to enter the Naval Reserve Medical School, after having received his commission as first lieutenant in the naval medical corps.

DR. CHARLES R. BIRD of Greensburg has completed arrangements with the Harvard surgical unit for service in the military hospitals of England, and will sail from New York on May 15. About fifty doctors and nurses are included in the expedition.

THE Huntington County Medical Society, at their April meeting, appointed the following National Defense Committee: Drs. M. H. Krebs, W. S. Grayston, W. F. Smith of Huntington; Dr. C. S. Black of Warren, and Dr. R. G. Johnston of Markle.

DURING the war the new buildings of the Evans Dental Department of the University of Pennsylvania will be converted into a hospital for the army and navy. It will have two hundred beds.

DR. BAYARD G. KEENEY, for several years secretary of the city board of health of Shelbyville, tendered his resignation as health officer the first of April to devote more time to his private practice.

THE commencement exercises of the Lutheran Hospital Training School for Nurses, Fort Wayne, were held Wednesday evening, May 9, at the St. Paul Auditorium. Fourteen nurses received their diplomas.

THE Department of Health of the City of New York has formally offered to supply the Federal government with the bacteriological products manufactured in its laboratories at figures which are said to represent practically the cost of production.

THE nineteenth annual meeting of the American Proctologic Society will be held in New York City, June 4 and 5, 1917. The Hotel Astor will be headquarters and place of meeting. A very interesting preliminary program has been issued.

IT is reported that the Physicians' Motor Club of Pennsylvania has undertaken to enroll one thousand automobiles belonging to its members, each of which is to be equipped with emergency racks carrying two stretchers. The service will be drilled on Belmont plateau, Fairmount Park.

DRS. J. E. HIATT, George A. Smith, C. C. Bitler, H. W. MacDonald, E. K. Westhafer and D. S. Wiggins, all of Newcastle, have combined their offices in a new building known as the Newcastle Clinic, and will be associated together in the practice of medicine. They also have associated with them Dr. Gerald Hiatt, dentist.

DRS. W. H. and ROSS C. MARTIN, who have been spending the winter months on their orange and grape fruit farm at Winter Haven, Florida, are returning to their home at Kokomo. They are making the return trip over land in a Haynes-Six, and will stop at Baltimore and attend clinics at Johns Hopkins.

THE Indiana University School of Medicine building again was damaged by fire on April 11. The fire was confined to the part of the structure which was damaged by the fire of December 7. The loss is estimated at \$1,000.

DR. J. A. DUGGAN, superintendent of the Healthwin (tuberculosis) Hospital at South Bend since its establishment, has resigned his position to do surgical work in the United States Navy. Dr. Harry W. Helmen is to succeed him in his work at the hospital.

THE Tennessee State Medical Association, at their annual meeting at Nashville, elected the following officers for the ensuing year: President, Dr. E. T. Newell, Chattanooga; vice-presidents, Drs. H. M. Cass of Johnson City; W. O. Sullivan, Newbern; T. G. Pollard, Nashville; secretary, Dr. Olin West, Nashville.

DR. PAUL E. BOWERS, medical superintendent for Indiana Hospital for the Insane Criminals and Indiana State Prison Hospital, delivered a series of lectures on Crime and Treatment of Crime to the police departments of Hammond, East Chicago and Gary, Indiana, recently, and these lectures were largely attended.

THE report of the State Board of Health for March shows that 7,332 cases of measles in Indiana were reported during the month, and 141 deaths as a result of the disease. There were 477 cases of smallpox reported, and only one death. Tuberculosis caused 408 deaths; pneumonia, 597 deaths; typhoid fever, 22 deaths; diphtheria, 31 deaths, and scarlet fever, 16 deaths.

THE leper, David Byers, at Fort Branch, Indiana, has now been placed under permanent quarantine in the house belonging to his wife. His wife and daughter are quarantined with him. All needed supplies are now furnished by the State Board of Health from the special Leper Fund. Dr. Hurty reports the disease is noticeably progressing.

UNDER the direction of the Marion County Society for the Prevention of Tuberculosis, a Fresh Air and Health Week was observed in the Indianapolis schools April 9 to 14. One of the most effective means the society has for combating tuberculosis is to conduct educational campaigns among school children.

HOSPITAL Unit M has been organized and equipped in Fort Wayne, with Dr. Miles F. Porter as surgeon-in-chief. The Unit consists of one director, one adjutant, two chief surgeons, four staff sergeants, one head nurse, twenty nurses and three clerks. Unit M now stands seventh on the list, and therefore may be called to leave for France at any time.

DR. MILES F. PORTER of Fort Wayne is acting chairman of the Indiana Department of the National Defense League. Other members of the committee are: Drs. J. R. Eastman and John H. Oliver of Indianapolis; Charles E. Barnett of Fort Wayne, S. A. Clark of South Bend, Edwin Walker of Evansville, Charles N. Combs and S. M. Rice of Terre Haute.

THE Women's Medical Association of New York City is planning a banquet to be given Wednesday evening, June 6, 1917, at the Hotel McAlpin for the woman physicians who will be in New York City for the meetings of the American Medical Association. Tickets may be obtained from Dr. Mathilda K. Wallin, 616 Madison Avenue, New York City (\$3).

THE Louisiana State Medical Society, at its annual meeting, elected the following officers for the ensuing year: President, Dr. Clarence Pierson of Jackson; first vice-president, Dr. C. G. Unsworth of New Orleans; second vice-president, Dr. A. B. Nelson of Shreveport; third vice-president, Dr. C. J. Menville of Terrebonne. The meeting was held April 17 and 18 at Alexandria.

UNDER date of April 10, the commissioner of internal revenue issued a rule revoking a Harrison Law ruling, as follows:

The ruling contained in T. D. 2194, holding synthetic substitutes subject to the provisions of the Act of Dec. 17, 1914, and requiring manufacturers of, dealers in, and physicians prescribing any such substitutes, as therein defined, to register and otherwise conform to the Harrison Narcotic Law and the regulations issued thereunder, is hereby revoked, to take effect this date.

THE following new members of the Indiana State Board of Health have been appointed by the Governor: Dr. John T. Hewitt of Terre Haute, to succeed Dr. John L. Freeland of Indianapolis (resigned); Dr. Hugh A. Cowing of Muncie, to succeed Dr. Harley H. Sutton of Aurora; Dr. James S. Boyers of Decatur will continue as a member, pending the election of his successor.

THE Society of American Bacteriologists is publishing a new journal, *Abstracts of Bacteriology*, to be known as the official organ of the society. It will contain reviews of all bacteriological literature appearing throughout the world, and will be similar in scope to the *Centralblatt für Bakteriologie* or the *Bulletin de l'Institut Pasteur*. The distinct advantage of the publication is the fact that it is to be published in English.

AT the annual meeting of the Medical Society of the State of New York, held at Utica, April 24, 25 and 26, the following officers were elected for the ensuing year: President, Dr. Alexander Lambert of New York; first vice-president, Dr. T. H. Haisted of Syracuse; third vice-president, Dr. M. B. Heyman of Central Islip; secretary, Dr. Floyd M. Crandall of New York; assistant secretary, Dr. E. L. Hunt of New York; treasurer, Dr. Frank Van Fleet of New York; assistant treasurer, Dr. Harlow Brooks of New York.

THE sixty-ninth annual meeting of the South Carolina Medical Association was held in Spartanburg, April 16 to 18, under the presidency of Dr. C. B. Earle of Greenville. Officers for the following year are: President, Dr. F. H. McLeod of Florence; first vice-president, Dr. K. M. Lynch of Charleston; second vice-president, Dr. L. Rosa H. Gantt of Spartanburg; third vice-president, Dr. P. G. Ellesor of Newberry; secretary and treasurer, Dr. E. A. Hines of Seneca. Next year's meeting is to be held at Aiken.

THE American Society for the Control of Cancer has prepared an outline of a lecture on cancer for the use of speakers engaged in the work of educating the public regarding the control of cancer. This outline has been adopted by the National Council of the society as being an authoritative summary of the essential points of our present knowledge of this disease. Copies may be obtained, free of charge, from the headquarters of the American Society for the Control of Cancer, 25 West 45th Street, New York.

BECAUSE of the congested condition of the Surgeon-General's office at Washington, this office has appointed medical boards in various parts of the country, composed of officers of the Medical Reserve Corps, to pass on applicants for the Medical Officers Reserve Corps. Dr. T. Victor Keene, Hume-Mansur Building, Indian-

apolis, is chairman for this section, and all applications for the Medical Officers Reserve Corps should be sent to him. This does not apply to applications for the Medical Corps. These applications should be sent to the Surgeon-General's office, Washington, as heretofore.

At the annual meeting of the American Association of Immunologists, held at the New York Academy of Medicine, April 6 and 7, under the presidency of Dr. Richard Weil of New York, the society unanimously adopted resolutions offering the services of the association as a body and of its members as individuals and the facilities of their laboratories to the Federal and the respective governments. The new officers for the ensuing year were elected as follows: President, Dr. John A. Kolmer of Philadelphia; treasurer, Dr. Williard J. Stone of Toledo; secretary, Dr. Martin J. Synnott of Montclair, N. J.

THE *Modern Hospital* announces that its June issue will be devoted to the subject of Occupational Therapy and Occupations for the Handicapped. They state that the importance of this subject has not been sufficiently realized until of late, when the nations at war have come to recognize the therapeutic and economic necessity of providing suitable occupations for those of their wounded and injured who are able to work, and maintain that this necessity is just as urgent in the case of the handicapped class in civil life. A large number of papers bearing on the various phases of this subject will be published in this number, and it promises to be an issue of more than ordinary interest and importance.

THE Indiana State Board of Health, at its meeting of April 13, made a ruling regarding the Indiana milk supply which is to go into effect Jan. 1, 1918. The regulation provides that all milk sold in the state must be graded, and the grade plainly marked on the container. Grade A is to designate superior quality, suitable for babies, and not likely to encourage cholera infantum and other children's diseases which in many instances are traceable to unsuitable milk; Grade B milk will be suitable for general purposes, and especially for the use of adults; and Grade C milk should be used only for cooking purposes. Grades are determined by experiments and are based on the soundest scientific knowledge. Infringement of the ruling will be punishable by law.

AMONG Indiana doctors who have received commissions for service in the Medical Reserve Corps are: Dr. George W. Wood, Indianapolis; Drs. J. P. Spooner and O. R. Lynch of Peru; Dr. C. E. Lines of Chili; Dr. G. D. Scott, Sullivan; Dr. H. L. Redman, Elizabethtown; Dr. W. R. Hutcheson, Greencastle; Dr. J. F. Gillespie, Greencastle; Dr. C. C. Conn, Bainbridge; Dr. Lemon, Mt. Meridian; Dr. L. L. Williams, Brazil; Dr. E. C. Chenoweth, Ninevah; Drs. James A. Work and L. A. Elliott, Elkhart; Will W. Holmes, Logansport, and Drs. B. M. Edlavitch, M. I. Rosenthal, W. D. Calvin, H. O. Bruggeman, E. M. VanBuskirk, A. E. Fauve, E. C. Singer, E. N. Mendenhall, K. C. Eberle and M. F. Porter of Fort Wayne.

THE Council on National Defense has issued the following notice to medical and pre-medical students:

"In the present national crisis a continuous supply of adequately trained medical officers is absolutely essential for the maintenance of armed forces in the field. It would be folly for the country to prepare for the immediate emergency alone—we must face the possibility of the war lasting for years. It is, therefore, the patriotic duty of all college students intending to study medicine to remain under instruction until the country can avail itself of their trained services.

"Medical schools are in a sense 'munition works' necessary to produce trained medical officers for the army and navy. All medical students must, therefore, in the interest of national safety continue their work until graduation. With the exception of such men as the navy can utilize, all graduates are urged to secure a hospital training which the Surgeon-General of the army and navy consider essential for their arms of the service."

IN honor of the fiftieth anniversary of his practice in medicine at Peru, the Miami County Medical Society arranged a banquet, on April 27, for Dr. James O. Ward. Forty-five physicians of the county and adjoining community and more than a hundred laymen attended the banquet. Dr. O. U. Carl of Peru served as toastmaster. Dr. J. C. Oliver and Dr. Stanton, both of Cincinnati and connected with the Miami Medical College from which Dr. Ward graduated fifty years ago, were present and spoke. Dr. G. C. Eckert, councillor of the 11th District; Dr. J. H. Oliver, president of Indiana State Medical Association; Dr. E. H. Griswold, president of the Eighth District Medical Society, and Dr. W. N. Wishard were among the doctors who responded to toasts. The Miami County Medical Society held a scientific meeting in the afternoon.

THERAPEUTIC NOTES

MONTGOMERY, in the *Medical Record* of Nov. 18, 1916, says that peroxide of hydrogen is now regarded as almost a specific in mercurial stomatitis.

THE *British Medical Journal* says that the hypodermic injection of emetine, which has been found so efficacious in acute dysentery, is practically valueless in the chronic form of amebic dysentery.

THE patent on aspirin expired in February. Aspirin is now sold under its scientific name, acetyl-salicylic acid, and of course at a price that is far less than the price formerly charged for the same product when sold under the patented name.

ATTENTION is now called to the suggestion made by DeMez of the School of Pharmacy of the University of the Philippines, concerning the use of a double salt of emetine and bismuth (emetine bismuthous iodide) in these chronic cases of amebic infection which has proved so successful in some of the army hospitals.

WHITTINGTON, in the *Journal of the Royal Medical Corps* for October (Therapeutic Gazette), reports on the use of stock vaccine in 230 cases of typhoid fever, and comes to the conclusion that the use of a stock vaccine in typhoid fever cannot be recommended as routine treatment. Not only is the vaccine disappointing in its effect in that it neither shortens nor reduces the number of complications, but there is a suspicion that vaccine increases the incidence of hemorrhage.

IN *The Journal A. M. A.* for April 7, 1917, Dr. R. P. Albaugh reports three deaths and a number of prostrations and illnesses caused by carbon monoxid poisoning. The symptoms, when the gas does not produce death promptly, are throbbing or feeling of pressure in the temples, epigastric distress, nausea, vomiting, weakness in the legs, severe, bursting headache, and finally coma. Carbon monoxid causes more cases of industrial illness and death than any other gas, and is a constant danger in many industries. The presence of the gas is difficult to detect because it is colorless, odorless and tasteless. It is found as a by-product wherever combustion of carbon containing materials occur, but it should not be confused with carbon dioxid.

MAGNESIUM chlorid is used quite generally in the field hospitals in France for the treatment of war wounds. In the Paris letter to the *Journal A. M. A.*, published April 14, 1917, is an account of the experiences of Dr. Guillaume-Louis, who personally took care of more than 1,200 severely wounded, and communicated the results of his work to the Society of Surgery of Paris. On the arrival of the wounded he always employed the same treatment, which was as follows: Removal of all foreign bodies and necrotic tissue; disinfection with ether. Various therapeutic measures were tried, but experience led to preference for magnesium chlorid. No drains were used, but instead he places in the wound a wick which soaks up the solution. On the surface he applies a compress saturated with the same solution. The dressing is renewed every day with the greatest possible aseptic precautions. Rapidly under the influence of magnesium chlorid the wound is cleansed, the pathogenic agents are diminished in number, and the secretions are dried up. In the course of a few days the wound is disinfected sufficiently so that it can be sutured for secondary union.

CORRESPONDENCE

DR. EASTMAN COMMENTS ON THE WAR

INDIANAPOLIS, May 4, 1917.

Dear Doctor Bulson:

I am in receipt of your letter, replying to which permit me to say that I think it proper to say to our colleagues in Indiana that unless revolution intervenes, the central powers can, so far as I was able to observe, hold out for a long time yet. In Germany and Austria, as is well known, the minimum amount of food required for the maintenance of health and strength is meted out equitably. However, officers of high rank and a member of the International Food Committee of Germany and Austria have told me that supplies are on hand and in sight to feed the soldiers and populace for an indefinite time as well or even better than during the last two years.

Every inch of ground is under cultivation; for example, along the roadsides up to and between the wagon ruts. The people have grown accustomed to the business of war. They have staked everything on victory. They have invested so universally in the war loans that they

feel that they are indeed fighting for existence, and if they cannot win they may as well, as we say in Indiana, "let the tail go with the hide." They are not likely to give up unless torn asunder by revolution.

It is, therefore, well in Indiana to mobilize medical forces and bring out the fullest possible list of applications for the Medical Reserve Corps. Doctors going from Indiana to France will, I think, be amazed at the opportunities offered for practice in the largest way in medicine, sanitation and surgery. For example, in the study and practice of surgery, the opportunities, I believe, are quite unexampled. During the war much new knowledge has been developed relating to the treatment of fractures and infected wounds; also the methods of the removal of foreign bodies have been greatly improved. Kinoplastic surgery, bone grafting and the surgery of joints are great and attractive fields of work and study for war surgeons.

I sent you yesterday a copy of a letter received from Washington, with information concerning application blanks for membership in the Medical Reserve Corps, which I shall be glad to send to any interested doctor.

I found the regular discipline of the army very wholesome and healthful. The cutting out of all luxury eating, while it reduced my girth somewhat, was conducive to good health. The health statistics of Germany and Austria show a marked decrease of stomach and intestinal diseases. This may be attributed to the scientific, if enforced, restrictions of diet. I am,

Very sincerely yours,

JOSEPH RILUS EASTMAN.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Delinquents Reinstated During April, 1917

ADAMS COUNTY	
Amos Reusser.....	Berne
CARROLL COUNTY	
T. L. Cooper.....	Camden, R. D.
CASS COUNTY	
F. W. Terflinger.....	Logansport
CLARK COUNTY	
D. C. Peyton.....	Jeffersonville
CLAY COUNTY	
William Palm.....	Harmony
J. A. Rawley.....	Brazil
L. L. Williams.....	Brazil
M. H. Young.....	Harmony
CRAWFORD COUNTY	
Peter Grant.....	Marengo

DAVISS COUNTY	
F. J. Freshley.....	Plainville
DECATUR COUNTY	
W. R. Turner.....	St. Paul
DE KALB COUNTY	
J. A. Clevenger.....	Garrett
M. F. Klingler.....	Garrett
DELAWARE COUNTY	
George E. Ames.....	Eaton
F. E. Hill.....	Muncie
O. W. Owens.....	Muncie
U. G. Powers.....	Albany
HENRY COUNTY	
Virgil Gordon.....	Blountsville
FOUNTAIN-WARREN COUNTY	
George Rowland.....	Covington
A. M. Sullivan.....	Attica
GIBSON COUNTY	
T. L. Lockhart.....	Owensville
O. C. Stephens.....	Fort Branch
GRANT COUNTY	
Glen D. Kimball.....	Marion
HUNTINGTON COUNTY	
G. G. Wimmer.....	Mount Etna
LAGRANGE COUNTY	
Chas. Dryer, Cincinnati, Ohio.....	St. Louis, Mo.
LAPORTE COUNTY	
W. Eberhardt.....	Michigan City
F. R. Leeds.....	Michigan City
J. W. Snyder.....	Michigan City
L. A. Wilson.....	Michigan City
MADISON COUNTY	
Thomas O'Neil.....	Anderson
G. A. Whitledge.....	Anderson
S. C. Willson.....	Anderson
MARION COUNTY	
Eugene Buehler.....	Indianapolis
J. H. Bull.....	Indianapolis
B. S. Potter, Cumberland.....	Julietta
O. W. Ridgeway.....	Indianapolis
S. P. Scherer.....	Indianapolis
A. L. Thurston.....	Indianapolis
H. A. Van Osdol.....	Indianapolis
H. T. Wagner.....	Indianapolis
Joel Whitaker.....	Indianapolis
A. L. Wilson.....	Indianapolis
E. C. Thomas.....	Indianapolis
MIAMI COUNTY	
E. A. Mills.....	Miami
NOBLE COUNTY	
N. J. Shook.....	Kendallville
ORANGE COUNTY	
F. D. Arthur.....	West Baden
J. R. Dillinger.....	French Lick
W. H. Patton, Hot Springs, Ark.....	Orleans
W. W. Sloan.....	French Lick
O. H. Stewart.....	Orleans
OWEN COUNTY	
J. T. Hazel.....	Freedom
PARKE-VERMILION COUNTY	
E. G. Green.....	Bloomington
M. F. Woodard.....	Bloomington
W. F. Butler.....	Cayuga

POSEY COUNTY

Carl Flucks.....Perry, Ark.
J. R. Ranes.....Mount Vernon

RIPLEY COUNTY

T. H. Brenton.....Osgood
C. E. Holton.....Holton

ST. JOSEPH COUNTY

H. Boyd-Snee.....South Bend

TIPECANOE COUNTY

R. V. Hannell.....Lafayette

UNION COUNTY

J. T. Bradley.....Brownsville

VANDERBURG COUNTY

C. P. Bacon.....Evansville
D. S. Goble.....Evansville
G. W. Tepe.....Evansville

WABASH COUNTY

P. G. Moore.....Wabash
E. A. Rogers.....Somerset
G. L. Shoemaker.....North Manchester

INDIANAPOLIS MEDICAL SOCIETY

Feb. 27, 1917

Meeting called to order by President Dr. T. B. Noble. Minutes of previous meeting were read and approved. Application of Dr. Clark E. Orders was read for first time. Secretary read a letter from Dr. Henry Ostroff of Reno, Nev., in which he expressed his appreciation for the honorary membership which the local society had accorded him. Dr. Noble having been called away, Dr. M. N. Hadley took the chair.

PROGRAM

Paper: Organization Work for Child Hygiene, Dr. Ada Schweitzer, Assistant Bacteriologist, State Board of Health.

Abstract: The conservation of child life is the most important form of conservation, yet every year thousands of children die from preventable causes. So strongly do the needs of motherhood and childhood appeal to human sympathy that numerous organizations devoted to their welfare are found in all countries. Since through lack of coordination some of the activities were being duplicated, the Federal Children's Bureau instituted a survey of all child welfare activities. At a conference of national organizations in Chicago, October, 1916, it was decided that the most important things to be undertaken are the promotion of birth registration, the education of the mother, the promotion of city and state bureaus of child welfare to do what the mother cannot do, and the establishment of rural health centers. To the end that education of the public may be effected, the consideration is urged of the following subjects: prenatal care, skilled obstetric service, infant care, breast feeding, control of milk supply, fresh air, sanitation, exposure to extremes of heat and cold, and to infections. That work of this kind is effective has been conclusively shown by constant lowering of infant mortality rates following improved conditions. Important in the work of organization are Divisions of Child Hygiene, under state health departments, whose business it shall be to keep in touch through national organizations with the most effective methods, to organize the work within the state and to cooperate

with all agencies concerned with the health of children.

Paper: Objections to Cauterization of the Nasal Mucous Membranes, Dr. E. DeWolf Wales.

Abstract: Cauterization is one of the oldest therapeutic agents. Twenty-five years ago the cautery was an important working tool but gradually it has been discarded and is now rarely used by the specialist. Cauterization of mucous membranes is accomplished by the galvano-cautery, and chronic or trichloroacetic acid fused on a probe or in saturated solution. This treatment is so easily accomplished that it becomes a great danger. It is easier to destroy than it is to save. One of the first objections to cauterization is the marked reaction to the burn. The mucous membrane swells and there is a feeling of soreness. This swelling increases and blocks the breathing space. The impaired drainage thus produced tends to infection of the nasal sinuses. Tonsillitis and nasopharyngitis with ear infection is a common result. Adhesions between burned surfaces are also common. Besides the reaction of the burn all the ducts to the mucous and serous glands which are destroyed results in atrophy of these glands but whenever the ducts are partially injured a stenosis results which later causes cystic degeneration of all glands thus affected. This cystic degeneration does not show immediately but may be marked after two years. Another objection is the scar tissue resulting from cauterization. Where there is scar tissue there is crusting. On these scar areas mucus collects and dries; the resulting crusts irritate and cause bleeding. Scar tissue is also a source of danger in middle life. A nose scarred by numerous cauterizations loses its functional integrity and imposes a vast amount of extra work on the mucosa of the naso-pharynx, larynx and bronchial tree. A nose once destroyed cannot be restored and the patient suffers from dryness, crusting, and a feeling of air hunger. Squamous epithelium the result of cauterization cannot perform the work of ciliated columnar epithelium. The function of the nose is carried on by its mucous membrane. Why destroy mucous membrane? Any treatment which impairs the function of the nose is bad treatment. Cauterization is a method of getting results without thought of final consequences. Cauterization produces pathology. It would be as rational to cauterize the cornea to help a patient's vision as to help him breathe by cauterization of the nasal mucosa. In the treatment of the mucous membrane of the nose there is no need of the cautery.

Dr. H. G. Hamer presented a device for maintaining the position of the bag and tubing used for the control of hemorrhage in cases of suprapubic prostatectomy, as follows. The control of hemorrhage following suprapubic prostatectomy frequently becomes of prime importance. Of the many methods suggested to accomplish this end gauze packing, fat implantation, etc., the use of the inflated rubber bag devised by Francis R. Hagner of Washington, D. C., has been found most satisfactory. After the enucleation of the prostate is completed a large curved staff is inserted through the urethra into the bladder and its tip made to protrude through the suprapubic opening into the bladder. Over the end of the sound or staff the rubber tube which is attached to the bag is pushed. The sound is then withdrawn, drawing with it the tube which brings the rubber bag into the bladder. The bag is distended with air or water and then

drawn down into and against the vesical orifice thus filling the cavity from which the prostatic tissue was removed. If this inflated bag can be held securely in position hemorrhage will be controlled. One of the difficulties encountered has been fixation of the bag in position. Usually this was done by wrapping some gauze around the tube and placing a clamp on it where the tube emerged from the penis, or the tube was drawn down one thigh and fastened by means of adhesive strips. Both of these methods were insecure and if much tension was made on the tube following the former method a great deal of soreness of the urethra followed, due to constant pressure on the urethra. I am indebted to my friend, Dr. Carl Lewis Wheeler of Lexington, Ky., for the suggestion and emphasis of the need of some mechanical device involving direct pressure over the operated area after prostatectomy and for his description of the device of Dr. Townsend of Rutland, Vt. In a conversation last October he and I agreed to develop some method of exerting pressure for control of hemorrhage and the device presented is the result of the efforts I have made in that direction and as a practical application has demonstrated its value. In October, 1916, I devised a wire frame or trestle here presented, for the purpose of accurately fixing the Hagner bag after it has been properly placed and dilated with air. Immediately after the operation the Hagner bag is drawn through the bladder in the usual manner. The tube from the bag is brought through the hole in the summit of the trestle-like framework. The bag is then distended by injecting air from a large syringe. Tension is made on the tube, bringing the bag down into the neck of the bladder, with as much pressure as desired, and held in position by the little screw clamp just outside the hole in the summit of the trestle. The frame is made of soft copper wire of sufficient size to have some rigidity and sufficient strength to hold any tension that might be made on it for this purpose. The flexibility of the frame always allows it to be molded to fit the individual case. It is not in the way of the dressings which may need to be changed several times before the removal of the Hagner bag, which is usually allowed to remain for twenty-four to forty-eight hours in order that any recurrent hemorrhage might be immediately controlled. I presented miniature models of the device to Dr. C. E. Burford of St. Louis and to Dr. Carl Lewis Wheeler of Lexington, Ky., last fall. Later on I sent regular sized models to Dr. Wheeler and also to Dr. Hugh Cabot of Boston. Dr. Wheeler, I believe, presented the appliance before the local medical society at Lexington, and it was described by Dr. Wishard at the Evansville meeting of the Ohio Valley Medical Association, Nov. 22, 1916. The apparatus has been in constant use by Dr. Wishard and myself in our suprapubic prostatectomies during the past four months and has been used by Dr. Wheeler of Lexington, Ky., and Dr. Bernhard Erdman and perhaps others. I wish to thank the society for the opportunity to make this presentation.

DISCUSSION

Dr. J. N. Hurty: The field in child hygiene is a large one and a beginning is just being made. Great laxity in reporting births in Indiana, at present about 90 per cent. are reported. The Indiana University Social Service is accomplishing a great deal of good with child conferences. As a matter of fact the child conferences have been held under the supervision of

federal authorities. This is community welfare work. Physicians in the state must adopt the proper attitude toward the people in order that the best results may be attained. Otherwise they lose an opportunity to make their influence felt.

Dr. C. M. McCaskey: Most men agree that the use of the cautery on nasal mucous membranes is bad. Submucous operations have no doubt reduced the use of the cautery.

GENERAL DISCUSSION

Dr. E. B. Mumford: Milk station work is very important in child hygiene. From a small start we have now eight stations, seven of which are open the entire year. Last year 1,650 babies were cared for at a per capita cost of 50 cents. The object of the work is educational. The stations are open to all physicians who have charity patients. The supervision of the nurse is a decided aid, but the physician may retain control of the feeding while the weights and other records are kept at the station. Cost of milk to families is the same as they have paid to grocers or dairymen previously. The cooperation of the citizens and the physicians is solicited.

Dr. Alfred Henry: More recently tuberculosis has come to be considered a disease of childhood the same as measles, whooping cough, scarlet fever, etc. Parents should be educated on this topic. The above mentioned conditions are designated as implanted, or they are pre-tuberculous conditions. The anemic child is predisposed to tuberculosis. Sixteen per cent. of all babies having tuberculosis die of tubercular meningitis. Physician can help by advising and advocating fresh air and proper hygiene.

Dr. A. L. Walters: Following Dr. Hamer's reference to suprapubic prostatectomies a new solution has recently been recommended for use as a dressing. Previously the large quantities of gauze dressings necessary to prevent bleeding was very annoying to the patient and gave a chance for hemorrhage when the packing was removed. By saturating a small amount of gauze with kefelin, a lipid coagulant, dissolved in ether, the discomfort and frequent bleeding on removal of the dressings are eliminated.

Dr. Louis Burckhardt: Our prenatal clinics serve a good purpose. The training of the mothers provides a basis for further education and instruction. After a few years it will be interesting to gather statistics giving a comparison between those children who have had prenatal care and those who have not, the time period to end with their entrance into the public schools. Our work in the city is only of short standing and results as yet cannot be tabulated.

Dr. Ada E. Schweitzer (in conclusion): There is a great deal of good work being done in the city. Dr. Baker of New York says that the solution of tuberculosis is close observation of the child, prenatal work and observation of the parents. Advice is easy to give but the carrying out of these plans is more difficult and unsatisfactory. The care of children from the prenatal stage on, means the reduction of infant mortality.

Meeting adjourned. Attendance 64.

March 6

Meeting was called to order by President T. B. Noble. Minutes of previous meeting were read and approved. Application of Dr. Carl Sputh was read for first time.

PROGRAM

Paper: Coagulen (Kocher-Fonio), Dr. H. K. Bonn.

Abstract: Coagulen is a sugary, brownish-red powder, free from albumen, which contains the heat resisting substances in animal blood causing coagulation. It is obtained by fractional centrifugalization and consists solely of the blood platelets. Therefore it is a physiologic styptic. Fonio of Berne, Switzerland, is responsible for this therapeutic agent which was introduced at Kocher's Clinic. The preparation may be used by mouth or by subcutaneous or intravenous injection. The solution must be sterilized. The preparation may be used also as a tamponade during operations and has been considered by foreign authorities to somewhat replace ligatures. The preparation does not interfere with the aseptis in any wound. The literature is contained principally in the foreign journals, and the preparation has been used in all forms of hemorrhage. Fonio's technic is described as practiced by him at the operating table, and he believes that he saves considerable blood and shortens the time of the operation by the use of Coagulen. Bonn has used Coagulen in five different cases of hemorrhage with excellent results. Coagulen was only used in these cases after all other methods had failed to check the bleeding. The cases consisted of hemorrhage from the bed of an enucleated intraligamentous fibroid, two cases of prostatectomy, one suprapubic and one perineal, superficial injury to the hand and following circumcision in a hemophilic child.

Paper: "Rheumatism" and Its Treatment, Dr. H. R. Alburger.

Abstract: Assuming the acceptance of the modern work which has demonstrated the cause of rheumatism as one or more members of the streptococcus group, the author makes a plea for the recognition of the name "rheumatism" as an appropriate one to indicate any acute or chronic streptococcal inflammation of the joints, muscles or nerves. Briefly the sources of infection are outlined with special reference to the common foci. Treatment is divided into the radical, removal or eradication of foci; palliative, or drug treatment; eliminative, including purgation and hydrotherapy; biological, including serum and vaccine therapy.

DISCUSSION

Dr. J. M. Cunningham: Use of term chronic rheumatism questionable. The term rheumatism to be used for those conditions which involve joints (poly) with swelling, redness, pain, increased temperature, etc. The point of entrance of specific streptococcus, cause of rheumatism, generally by tonsillar route. Many cavities that may contain infective organism but most of them are in the head. In addition, however, we may find it in the gallbladder, appendix, colon. In acute articular rheumatism all cases must be treated symptomatically. Sometimes heat and sometimes cold gives most relief. Association of chorea and rheumatism in childhood is often seen. The organisms are often the same. Tonsils often focus. "Growing pains" in limbs in childhood generally fall into the class mentioned in this paper.

Dr. Clevenger: Infection from ear, nose and throat region very general. Poor hygienic conditions are a great factor in aiding further extension of focal infections. Many appendices and tonsils have been needlessly removed. Complete and thorough examinations by skilled internist necessary.

Dr. Levis asked Dr. Bonn if Coagulose was same as Coagulen. He asked Dr. Alburger if he had had any experience with sodium salicylate intravenously.

Dr. D. W. Layman: Interested in results of tonsillectomies in arthritic cases. These cases are divided into the following classes according to statistics given in a recent number of the *Johns Hopkins Bulletin*.

(1) Infectious, (2) myalgic, (3) rheumatoid, (4) acute rheumatic fever. The first comes on slowly with no cardiac involvement. Second explains itself; third, progressive types terminating in ankylosis; fourth, following close on tonsillitis with high temperature corresponding to acute articular rheumatism. The results of treatment were as follows: In the first the majority improved; second, all well; third, five out of nine worse, two no improvement, two improved. In the fourth class twenty-five cases after four years show only four recurrences following tonsils out. Twenty-three cases had cardiopathies.

Dr. Erdman: Coagulen has a very decided although limited field of usefulness. Valuable over and above similar drugs. Does not entirely settle question of styptics. No doubt but that in case of prostatectomy mentioned, Coagulen had a life saving effect. Cited a case showing good effects of transfusion as effective styptic measure in secondary hemorrhage.

Dr. Bonn (in conclusion): Coagulose has nothing in common with Coagulen. An entirely different preparation. Gauze with Coagulen into uterus prevented bleeding following curettage for retained secundines.

Dr. Alburger (in conclusion): Acute articular rheumatism is distinctive in clinical picture and etiology. Poynter and Payne found specific diplococcus in joints. Should have credit. Question of diet has some effect indirectly in acute and chronic rheumatism. Never used sodium salicylate, thought it might do some good in very acute cases. After organisms are deposited in joints doubtful if any effects from sodium salicylate.

Meeting adjourned. Attendance 75.

March 13

The meeting was called to order by Dr. M. N. Hadley, first vice president. Minutes of the previous meeting were read and approved. The secretary read a card bearing holiday greetings from Dr. Paul F. Martin who is at the Royal Reserve Hospital No. 2 in Bohemia.

PROGRAM

Case Report: Purulent Leptomeningitis of Otitic Origin, Dr. D. W. Layman.

Case Report: Thrombo-angiitis Obliterans of the Radial, Dr. M. J. Barry.

Case Report: Mollusum Contagiosum, Dr. C. R. Strickland.

DISCUSSION

Dr. C. F. Neu: The report of the first case emphasizes the advisability of surgery in purulent meningitis. There are very few recoveries in these cases. Intracranial decompression is worth consideration in all meningitic cases.

Dr. J. W. Carmack mentioned a case of decided arteriosclerosis in which first had pain on dorsum of foot followed in one week with discoloration which gradually extended almost to the knee. The extremity was cold and it appeared that an amputation would be necessary as soon as the line of demarcation

appeared. However, the condition began to clear up, the discoloration gradually fading. Is an interesting case to compare with Dr. Barry's.

Dr. J. Eberwein: Has anyone ever operated and removed the occluded portion of the artery?

Dr. M. J. Barry: The only operation reported in a case of this kind was for gangrene. No operation has been done in the acute stage. Inadvisable because the etiology is unknown. If the process is infectious it would probably continue in spite of the amputation.

Dr. D. W. Layman: Autogenous vaccines are frequently of aid in otitis media. There is no success with vaccines in cases of purulent meningitis.

Dr. A. W. Brayton: Dr. Strickland's report is very interesting and he deserves credit for presenting these cases of molluscum contagiosum. Schamberg says there are two cases in a thousand. In the present instance there are three cases in one family. Any mercury preparation will help the condition.

Dr. F. W. Cregor: Molluscum contagiosum is often considered a precancerous condition on account of the presence of vacuolated cells such as are found in Paget's disease. Molluscum contagiosum is frequently found in children because of the fact that they play with animals and contract the disease from them. I would like to call attention to some bad results recently appearing following the use of salvarsan and due no doubt to a fake product manufactured in this city and marketed in this community. About 800 packages of the fake product have been sold. The package is a very good imitation, even to the paper and the printing, and it is practically impossible to tell the difference from the genuine product.

Dr. W. B. Kitchen: There is one means of differentiating the true from the bogus salvarsan. The seal over the end of the spurious product is plain, while on the original package the seal is embossed.

Meeting adjourned. Attendance 53.

March 20

The meeting was called to order by Dr. M. N. Hadley, the first vice president. The minutes of the previous meeting were read and approved. The applications of Drs. E. E. Hodgins, C. B. McCulloch and Scott Edwards were read for the second time and referred to the Judicial Council. The applications of Drs. B. G. Kenney and Frank Mann were read for the first time. The secretary read a letter from Mr. F. E. Shortemeier, executive secretary of the State Association, who asked that a list of physicians eligible for membership in the Indianapolis Medical Society be submitted to him as soon as possible. This matter was referred to the Council. The secretary read a communication from the local branch of the American Pharmaceutical Society inviting the members of the medical society to a program to be given soon. Dr. Hadley was called from the meeting and Dr. David Ross took the chair.

PROGRAM

Paper: Acute Heart Attacks, Dr. George S. Bond.

Paper: The Part Played by the Eye in General Practice, Dr. Frank A. Morrison.

DISCUSSION

Dr. F. B. Wynn: The element of pain as a more or less constant factor in heart troubles is important, especially in any infectious process affecting the

myocardium. This is similar to the sensitiveness found over tuberculous areas. Mentioned a case of malignant endocarditis with thrombi and emboli, which latter was thrown into one of the coronary vessels and gave rise to angina pectoris symptom. So-called "soldier's heart" of the present war is caused by undernourishment, constant anxiety with vasoconstriction in the peripheral circulation and consequently more work thrown on the heart.

Most of heart diseases recognized by us are the chronic cardiac cases. It is very exceptional for the practitioner to define the early acute cardiac diseases. We must make these diagnoses early as well as those of tuberculosis. The simple vegetative forms of endocarditis are the ones we do not find. Acute rhinitis, tonsillitis and influenza followed by heart symptoms must be given careful and prolonged attention and consideration.

Dr. A. C. Kimberlin: As general practitioners we do not make the deductions of which we are capable in eye troubles. We are apt to pass by eye conditions. Study and application to this subject will be great aid to man in general medicine. Cases mentioned by Dr. Morrison as "suggestive cures" gives us a factor we must use.

In cardiopathies we ought to know (1) etiology and (2) something of the pathology of the condition. We too often associate heart with kidney lesions. Comparison of heart tones and feel of pulse gives a better criterion than simply heart tones alone. Urinary findings also of importance.

Pain is common in organic heart lesions. Syphilitic aorta is more frequent and latent in women than in men. Excessive use of tobacco also a frequent cause of cardiac pain (angina). Hyperacidity must be remembered as a cause of substernal or cardiac pain.

Mentioned a case of paroxysmal tachycardia in which the arteries were almost emptied. This was followed by gangrene of the leg, amputation and death.

Dr. George S. Bond (in conclusion): I wish to emphasize the fact that cardiac pain is a symptom of many conditions, some of no importance and others involving very great danger.

Meeting adjourned. Attendance 74.

March 27

Meeting was called to order by the president, Dr. T. B. Noble. Minutes of the previous meeting read and approved. Application of Dr. J. C. Carter was read for first time and ordered posted. Application of Dr. C. E. Orders was read for second time and referred to Council. Applications of Drs. E. E. Hodgins, C. B. McCulloch and Scott R. Edwards, having been passed by the Council, these men were elected to membership by the society.

Dr. Noble introduced Hon. Harry S. New, Senator from Indiana, by saying that the time had come when we were to be weighed in the balance and that it was to be hoped that we would meet the occasion as all men should. We must take our stand, look each other in the eye and be ready to act.

Hon. Harry S. New wanted it understood that he was present entirely in an unofficial capacity. Was giving only his personal opinion when he stated that he considered the country at war now. Preparation is necessary for the physician in the army just as it is for the recruits. All need training. There will be a call for 25,000 physicians. Taking the total number

of physicians in the country as about 150,000, this will mean that one of every six physicians in the country will be called. Country needs men. We must respond. The duty rests heavily on you as physicians.

Dr. T. V. Keene stated facts bearing on the situation from an army standpoint. Gave statistics on number of physicians available. On account of ineligibility from age, physical disability and medical protection of rural communities, the call would more than likely mean that one of every three or four physicians would be called. This means that about 175 of the 226 eligible members of our local society would be asked to go.

Dr. J. V. Reed stated requirements for entrance to the navy. It will be difficult to leave family, home and practice. Those physicians remaining at home ought to look after their confrères' practices in the same fashion as has been done in England.

Dr. George M. Wells gave the details of army life with the correlation of the various departments. The army physician must know something about each department in order to be of highest efficiency.

Dr. L. D. Carter spoke of the National Guard which has so often been neglected. At present there is a great lack of men. Any medical officer should have some military training.

The secretary read the following resolution which was submitted by Dr. T. V. Keene:

WHEREAS, It has been asserted by men high in the counsels of our government that at this time the United States is practically in a state of war with a foreign power, and

WHEREAS, It is highly probable that an actual state of war may be formally recognized by Congress, with the calling for a large volunteer army demanding the services of many medical men now in civil practice, be it

Resolved, That we, the Indianapolis Medical Society hereby endorse in principle the recommendation made by the Surgeon General of the Army, in *The Journal of the American Medical Association*, that some system for the care of the medical practices of the medical men entering into military service be organized, and that the president of this society appoint a committee of five members to study this problem and make recommendations to this society as to the best means by which this end may be attained.

The resolution was unanimously adopted by the society.

Dr. A. E. Sterne moved that a vote of thanks be extended Hon. H. S. New for the address which he delivered. Passed unanimously.

Meeting adjourned. Attendance 180.

April 3

Meeting called to order by the president, Dr. T. B. Noble. Minutes of previous meeting were read and approved. Application of Dr. Carl B. Sputh was read for the second time and referred to the Council. Application of Dr. Harry J. Lemmon was read for the first time and posted.

PROGRAM

Paper: Tuberculosis of the Cecum. Dr. John W. Sluss.

Abstract.—Tuberculosis of the cecum is very often a primary affection, the infective agent reaching the favored locality by means of contaminative food. The tubercle bacilli tends to lodge in the ileocecal region by reason of various physiological and anatomical conditions. The pathological changes fall into three

stages: (1) Ulceration of the mucosa; (2) local peritonitis and hyperplasia; (3) cicatrization and stenosis. The symptomatology is dependent on the stage of the disease: in the first, mild inflammatory symptoms; in the second, a variety of digestive and intestinal disturbances, functional in character; in the third, intestinal obstruction. The treatment in the first stage should be conservative, applicable to tuberculosis generally; in the second and third, operative. The operative results are excellent.

Paper: Some Observations on the Causes of Post-operative Nephritis. Dr. Karl R. Ruddell.

Abstract.—We became interested in the subject of postoperative nephritis with special regard to infection, and ether anesthesia as causative factors. In a review of the literature the weight of opinion seems to be that ether is not eliminated to any large degree by the kidneys and does not cause an intoxication nephritis even after intravenous administration. On the other hand Dick and Dick and others have been able to demonstrate pathogenic organisms in the urine of cases suffering from nephritis, identical with those found at the site of local infections elsewhere. Having just completed the study of a series of five hundred cases in which the urine was examined before and after operation the results are summarized as follows: Fifty-nine per cent. of all cases examined before operation showed evidence of kidney disturbance, 32 per cent. showing albumin and pus cells. In the postoperative urines 64 per cent. gave evidence of kidney involvement. A few cases showing evidence of kidney disturbance before operation cleared up abruptly following operation. By far the largest percentage of cases showed no noticeable change in the pre- and postoperative findings. A few cases showed evidence of profound kidney disturbance following operation. In this class of cases we were able to cultivate pathogenic bacteria from the urine, which after being injected into a rabbit were recovered at autopsy. In conclusion we believe that an infection is present in the kidneys in practically every case of postoperative nephritis of marked severity or of long standing and that cases of albuminuria following operations on healthy individuals are of short duration and are physiological in character. We believe that the infection is lighted up in the kidney by lowering the body resistance, by decreasing the activity of the kidney and increasing the load on it by trauma and decreased intestinal excretion, and finally by the liberation of a massive dose of infection into the blood stream incident to trauma of infected tissue.

DISCUSSION

Dr. W. D. Gatch: Dr. Sluss rightly considers two stages: (1) ulcerative, (2) indurative. Difficult to differentiate even microscopically tuberculous from carcinomatous processes. Association of tuberculosis of the gut with pulmonary tuberculosis very close. Foci are lighted up by operation.

Dr. Ruddell's paper a distinct contribution. We must admit ether does not cause postoperative suppression of urine. Ether eliminated almost entirely by lungs. Readily thrown off on account of low vaporizing temperature. If narcosis is too deep, ether produces same effect as severe hemorrhage. Blood accumulates in veins and is not sent back to heart.

Postoperative fever due to proteid split products in wound. These have same effect on kidney as any infection.

Dr. Scott R. Edwards: There are certain points

in Dr. Ruddell's paper regarding nephritis, which undoubtedly have not received the consideration due them in the past. A study of any series of statistics regarding the bacteriology of infective nephritis show the colon bacillus and staphylococcus to be regarded as the prime offenders in this condition. Another accepted point is the association with pus in the urine as a diagnostic point of the condition. Dick and Dick in different reports have shown the presence of pathogenic bacteria in all cases of nephritis studied by them and the greater percentage of organisms found were of the pneumo-streptococcus group grown by anaerobic methods. In a series of acute, subacute and chronic nephritis in which the bacteriology of the urine was determined by Dr. MacDonald and myself, we were able to confirm these findings absolutely. In our opinion the primary kidney lesion, especially of the cortex, is brought about by the pneumo-streptococcus group of organisms and since they are not potentially pus producers, lack of pus in the urine does not rule out an infective nephritis. Pus appears after the secondary invasion of the accompanying secondary infection.

Dr. H. O. Pantzer: Vulnerability of ileocecum due to two causes: (1) narrowed gut at this site together with ileocecal valve constitutes the physiologic barrier against which peristaltic force drives its often infectious materials; (2) imperfect descent, during embryonal life, of ascending colon, results in distortion and band-like attachments of the cecum which impede its function and vitiate function of ileocecal valve. These beget traumatism and infection.

Dr. Gatch's case of multiple circular constriction of the bowel, recalls parallel case reported by me in the early nineties. Case presented at operation twelve constrictions small enough to hardly pass a goose quill, and besides many of less caliber. In latter the tuberculous process coming from infected mesenteric gland had ascended on both sides of the intestine but only reached part way round, and thus clearly revealed the tuberculous adjacent mesenteric glands as the starting point. This differentiates these cases from that described by Dr. Sluss. The latter evidently arose from within the intestines, being primary ulcer of the intestinal mucosa. This origin makes for rapidly destructive changes and is relatively rare. The former class is less rapidly destructive and often comes to spontaneous recovery.

Edeboh's observations made many years ago, that tuberculous peritonitis develops dark pigmentation of the skin is of value in diagnosis.

Rectal temperature in these cases commonly reveals one to two degrees above normal, when oral temperature is below normal.

Relative frequency of streptococcus infection found by Drs. Ruddell and Edwards, may be explained on a simple fact. Other observations were made several years ago, and by men working in other fields. Our men made their observations the last two years, during which time streptococcus infections predominated. The epidemiologic character of all kinds of infectious diseases differs greatly in different epidemics.

Dr. A. C. Kimberlin: Dr. Ruddell's paper is extremely interesting. What is to become of Bright's disease, long recognized as a symptom? This data is bringing us to an infectious basis for kidney lesions. Perhaps surgeon might well defer surgical work until kidney is cleared of infection.

Mistake to consider ether as only factor in post-operative nephritis. Previous conditions have laid foundation for future pathology. Colon bacilli filter

through glomerulus and are found in pelvis of kidney—cocci do not.

Dr. J. A. MacDonald: Question as to whether colon bacillus is most common organism found in kidney. Colon bacillus produces certain condition while in parenchyma. In a urine filled with casts, pus and bacilli we may expect to find the phthalein test low. In cocci infections do not find this difference in phthalein test.

First acute renal attack seldom kills. Person dies generally in an acute exacerbation. Physiological albuminuria may be due to gross manipulation of clean tissue or to the effect on the kidney of the proteid split products.

Nephritis following ether administration is important in connection with surgeon's technic. Must have gentle, deft, careful surgery. Manipulation often is cause of forcing infection into blood stream.

Complement fixation test in cases of abdominal tuberculosis will be of great value.

Dr. L. F. Page: Great question confronting us is when to remove tonsils. Large number of children will show pus and albumin in urine. Help of internist must be sought.

Not convinced that ether is not a factor in production of postoperative kidney lesions. In local anesthesia seems to be no trouble.

Dr. W. S. Tomlin: Mentioned a case of mastoiditis in which two urinalyses gave contra-indications to operation. Condition was very serious and finally operation was decided on followed by disappearance of kidney signs and good recovery. Cannot wait too long in a case of focal infection. Careful tonsillectomy not likely to aggravate condition permanently.

Dr. J. W. Sluss (in conclusion): Does believe in primary gut tuberculosis.

Dr. K. R. Ruddell (in conclusion): Did not intend to say that anesthesia has no effect on kidney. Indirect affect by peripheral dilatation of vessels with lowering of body temperature.

Meeting adjourned. Attendance 85.

L. H. MAXWELL, Secretary.

BARTHOLOMEW COUNTY

Bartholomew County Medical Society met in regular session April 10 in Dr. A. J. Banker's office at Columbus, and was called to order by President J. I. Maris.

Dr. H. H. Kamman read the first paper of the evening, on "Internal Secretions," and Dr. W. J. Norton of Hope gave a paper on "Herpes Zoster." Both papers were exceedingly interesting. Dr. A. P. Roope opened the discussion and was followed by Drs. A. J. Banker, George T. McCoy and F. D. Norton.

Nineteen members out of twenty-five were present.

Adjourned.

JAMES W. BENHAM, Secretary.

MADISON COUNTY

Madison County Medical Society met in Anderson at 4 p. m., on April 24, with President T. M. Jones in the chair. Members present, ten. Dr. John I. Rine of Lapel was a new member taken in.

A committee consisting of L. F. Schmauss, B. H. Cook and E. M. Conrad, was appointed to see how candidates to Constitutional Convention stood toward physicians.

Program consisted of oral report of difficult cases. Dr. Wm. Miley and president reported a case of infected cyst of pancreas, which was not diagnosed until an exploratory incision was made. Each doctor reported a case of interest.

Adjourned.

SETH IRWIN, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

FERRIC CACODYLATE; IRON CACODYLATE.—A ferric salt of cacodylic acid containing from 39.7 to 44.9 per cent. arsenic (As). A grayish-brown powder, soluble in water. The use of ferric cacodylate has been proposed in cases where the effects of iron salts and the mild arsenic effect of cacodylates is desired. Dosage: From 0.015 to 0.1 Gm.

AMPULES IRON CACODYLATE-MULFORD, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. The H. K. Mulford Co., Philadelphia.

AMPOULES IRON CACODYLATE-SQUIBB, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. E. R. Squibb and Sons, New York City (*Jour. A. M. A.*, April 7, 1917, p. 1043).

ACETYSALICYLIC ACID-SQUIBB.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. E. R. Squibb and Sons, New York City.

ASPIRIN, L. & F.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. Lehn & Fink, New York City (*Jour. A. M. A.*, April 28, 1917, p. 1261).

PROPAGANDA FOR REFORM

PIPERAZIN AND OTHER ORGANIC URATE SOLVENTS.—From a review of the literature P. J. Hanzlik concludes: There is no reliable evidence to show that piperazin, in small or therapeutic doses, imparts to urine urate solvent qualities, either by direct addition or after excretion; excessive doses produce a slight but negligible increase in uric acid excretion, the same being effectively produced by sodium bicarbonate or sodium citrate; there is no reliable evidence to indicate that piperazin can remove or prevent urate deposits; diuresis is uninfluenced by even large doses of piperazin and its administration does not materially reduce the acidity of the urine; scientific evidence, though limited, and clinical opinion indicates that piperazin is valueless in gout. Hanzlik also reports that there is sufficient evidence to indicate the worthlessness of the following as urate solvents: quinic acid, quinoline, colchicum, piperidin, Urosin, Lycetol, Sidonal, Lysidin and Uiol (*Jour. Lab. and Clin. Med.*, February, 1917, p. 308).

CYANOCUPROL.—Studies of the effects of "cyanocuprol" on tuberculous processes, carried out by Japanese investigators, have been published. "Cyanocuprol" is stated to be a copper cyanid preparation, the exact composition of which is being kept secret. Even if its identity should become known, the use of "cyanocuprol" is decidedly in the experimental stage (*Jour. A. M. A.*, April 7, 1917, p. 1057).

AMBRINE.—Ambrine is a French secret preparation that has been on the market for many years. It has recently come into prominence through sensational articles in the lay press. For all practical purposes it is solid paraffin to which some material has been added to make it adhesive and more plastic. For use it is heated until liquid and then applied to open wounds and burns, forming a relatively impervious dressing (*Jour. A. M. A.*, April 7, 1917, p. 1057).

PARAFFIN FILMS.—The popular propaganda for "Ambrine" having brought the paraffin film treatment

of burns into prominence, Torald Sollmann has instituted experiments to devise a suitable, open formula preparation which is simple and yet meets all requirements. He suggests that surgeons who desire to experiment with the paraffin treatment of burns use simple preparations of known composition. Ordinary paraffin melting at about 50 C. (122 F.) appears to possess practically the mechanical properties of "Ambrine." A mixture containing some asphaltum (asphalt varnish, Trinidad or Bermudez, "asphalt cement" and Texas asphalt were tried) gives a preparation of superior pliability. Other formulas are given and their trial suggested (*Jour. A. M. A.*, April 7, 1917, p. 1037).

CORPORA LUTEA (SOLUBLE EXTRACT).—The Council on Pharmacy and Chemistry reports that "Corpora Lutea (Soluble Extract)" marketed by Parke, Davis and Co. in the form of ampules for hypodermic administration is ineligible for admission to New and Nonofficial Remedies, because it is a secret preparation advertised under extravagant claims. No statement of composition is made beyond the indefinite claim that it is an aqueous solution of "soluble Corpora Lutea Extract," each ampule corresponding to 0.2 Gm. desiccated gland. How these soluble products are obtained, whether they represent all the water-soluble principles, or whether some have been eliminated is not stated. The claims made for the action and uses of the preparation do not make clear the essentially experimental status of the article and are therefore misleading. Further, the use of this extract is advised not only in functional amenorrhea and the ordinary reflex consequences of physiologic or artificial menopause, but also in conditions where the expectation of benefit cannot possibly be fulfilled (*Jour. A. M. A.*, April 7, 1917, p. 1056).

STERLING VIOLET RAY GENERATOR.—This is a small frequency apparatus with some vacuum and possibly other electrodes. The apparatus is not one for producing violet or ultra-violet rays in the scientific meaning of those words. The apparatus will not do the things claimed for it in the advertising booklet which includes the treatment of practically every ailment known to mankind (*Jour. A. M. A.*, April 14, 1917, p. 1141).

PHARMACOLOGY OF STOVAINE.—M. I. Smith and R. A. Hatcher find that in toxic doses stovaine produces death in animals by inducing immediate and simultaneous paralysis of the heart and the respiration, the action on each being independent of the other. They find that stovaine disappears rapidly from the blood stream after its intravenous injection. Stovaine is slightly more toxic than novocaine by similar modes of administration and complete recovery does not follow the administration of toxic doses of stovaine so promptly as it does with corresponding doses of novocaine (*Jour. Pharm. and Exp. Thera.*, January, 1917, p. 231).

HEXAMETHYLENAMIN IN PYELITIS.—I. A. Abt advises caution in the administration of hexamethylenamin in the pyelitis of infants. It should be under continuous observation and its use should be continued for an extended period. The urine should be frequently examined for blood. Abt has more than once seen cases of fatal nephritis which he believes due to the overuse of hexamethylenamin. He advises that, if given to infants under 1 year of age, it should be given in one grain doses followed by water. This dose may be repeated four or five times daily (*Jour. A. M. A.*, April 14, 1917, p. 1100).

THE LUTETIN TEST.—Confirmatory of previous investigations, H. N. Cole and H. V. Parysek find that some non-syphilitics respond positively to the lutetin test and that in those non-syphilitics who do not respond spontaneously the reaction can generally be provoked by iodides. They also demonstrated that

the reaction may be provoked by potassium nitrate and potassium bromide. Proving that the potassium ion in the potassium iodide and bromide was not concerned in the reaction, they found that the luetin test may be provoked by sodium bromide, sodium iodide and calcium bromide (*Jour. A. M. A.*, April 14, 1917, p. 1089).

ABOLITION OF THE SALVARSAN PATENT.—The Chicago Medical Society and the St. Louis Medical Society urge the abolition of the salvarsan patent. The patent should be abrogated, not only because the patentees have not supplied the demand, not alone because they have dictated to the medical profession who should have the drug and how much a physician might have, not alone because of the war with Germany, not alone because of the special needs of the government at this time for the control of venereal diseases, not alone because, as some claim, the patent at Washington does not correctly describe the product, but also because the people who are supplying this product are charging prices that are exorbitant. In order that a sufficient supply, to control the ravages of one of the most serious diseases that afflict humanity, may be assured, it is the duty of Congress to abrogate the salvarsan patent (*Jour. A. M. A.*, April 21, 1917, pp. 1187 and 1203).

CITRIC ACID AND CITRATES.—Citric acid and the alkali citrates, potassium citrate and sodium citrate, are oxidized in the body with formation of carbonates and hence tend to increase the alkalinity of the blood. Citric acid and the alkali citrates tend to render the urine less acid and, in large doses, render it alkaline (*Jour. A. M. A.*, April 21, 1917, p. 1206).

PEPSODENT.—Wm. J. Gies writes that Pepsodent is a dentifrice widely advertised as a mucin digestant. In a research conducted for the First District Dental Society of the State of New York, Professor Gies and Miss Franke found that the digestive claims were not warranted in any degree. Gies holds that there is about as much common sense in the proposed use of Pepsodent for this purpose as there is in the oral administration of a few grains of Lactopeptine to improve impaired tryptic digestion in the intestines (*Jour. A. M. A.*, April 28, 1917, p. 1278).

BOOK REVIEWS

NEW AND NONOFFICIAL REMEDIES, 1917, containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to Jan. 1, 1917. Cloth. Price, postpaid, \$1.00. Pp. 412 + xxiv. Chicago: American Medical Association, 1917.

This book lists and describes the non-secret proprietary remedies that have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. It also describes the newer non-proprietary remedies which give promise of some real value that have been accepted by the Council. Each description includes the chief facts physicians desire to know concerning composition, dosage, indications, cautions to be observed, etc. The book also contains general articles which compare the value of the proprietary remedies with the established drugs they are intended to supplant. Every physician who desires to further the cause of scientific prescribing, and who desires to aid in diminishing the domination of commercialism in therapeutics in this country should have a copy of this book for ready reference.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1916. Cloth. Price, postpaid, 50 cents. Pp. 87. Chicago: American Medical Association, 1917.

This volume contains the reports of the Council which were adopted and authorized for publication during 1916. It includes reports of the Council previously published in *The Journal of the American Medical Association* and also reports which, because of their highly technical character or of their lesser importance, were not published in *The Journal*.

In this volume the Council sets forth the reasons for the rejection of the articles which were examined and found ineligible for New and Nonofficial Remedies. It also explains why certain preparations included in previous volumes are not contained in the latest (1917) edition of New and Nonofficial Remedies. Physicians who wish to be informed in regard to the status of proprietary and unofficial remedies should have the volumes of the Council Reports, in addition to New and Nonofficial Remedies.

THE NERVO-MUSCULAR MECHANISM OF THE EYES AND ROUTINE IN EYE WORK. By G. C. Savage, M.D. Nashville, Tenn. Published by the author. 70 pages. Price, \$1.00.

A knowledge of myology or the action of the ocular muscles is important for every student of ophthalmology. For many years Dr. Savage has been an earnest student of the subject, and his many papers and books on the subject place him in a position of authority even though some of his theories may be questioned by those who have given the subject less critical study.

The essential aim of the author of this book is to make clear and easy the study of the ocular muscles from the only two points of view—the muscles themselves, and the brain centers controlling them in their individual and associated actions. The book is divided into two parts—the first, the Nervo-Muscular Mechanism of the Eyes, and the second, Routine in Eye Work. Much excellent advice is given concerning the handling of refraction cases, the prescribing of glasses, and the recommendations to be given to patients.

The book will be found to be a valuable addition to the ophthalmologist's library.

THE NEUROTIC CONSTITUTION. Outlines of a Comparative Individualistic Psychology and Psychotherapy. By Dr. Alfred Adler, Vienna. Authorized English Translation by Bernard Glueck, M.D., Director Psychiatric Clinic, Sing Sing Prison, and John E. Lind, M.D., Senior Assistant Physician, St. Elizabeth's Hospital; Associate Psychiatrist, Washington Asylum Hospital, and Instructor in Psychiatry, Georgetown Medical College. With an Introduction by William A. White. Cloth, \$3.00 net. Postage 20c. New York: Moffat, Yard & Company, 1917.

This book is intended for physicians, educators, and those interested in psycho-analysis. Followers of this new system of medical philosophy already have become impressed with the significance of comparative individualistic psychology in its bearing on the problems of mental processes. In this book the author presents the most important results of his studies of the neuroses along these lines.

The first three chapters are devoted to the theoretical part, and the rest of the volume comprises the practical part. In his analysis of the neurotic

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constitution the author discusses the psychology of the emotional states, the perverted psychic states, the whole abnormal mental life of the neurotic in a way that compels the greatest interest.

This is not a book for all physicians. Some interest in and some knowledge of the subject of psycho-analysis is presumed on the part of anyone who could derive either pleasure or benefit from such a work. Only to those really interested in this phase of medicine will this book appeal, and only to those is this book addressed.

THE PSYCHO-ANALYTIC METHOD. By Dr. Oskar Pfister, Pastor and Seminary Teacher in Zurich. Authorized Translation by Dr. Charles Rockwell Payne. With Introductions by Dr. Sigmund Freud and Dr. G. Stanley Hall. Cloth, \$4.00 net. Postage 20c. New York: Moffat, Yard & Company, 1917.

Psycho-analysis can no longer be regarded as a new subject. It is already understood and followed by many physicians not only abroad but in this country as well. Not only medical men but pedagogues, clergymen, psychologists and philosophers in general have begun to devote increasing interest to this science.

This book is intended for medical men, educators, and all serious students of psycho-analysis. Written by a non-medical man it discusses this subject so as to make it known to all laymen who take an interest in it. The importance and value of such a work is indicated by the comment of Sigmund Freud, who says of it, "A book like this of Pfister's, which will make the analysis known to educators, will be assured of the gratitude of future generations."

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The author's method of presenting the subject is delightful, and the subject when presented in such a manner is made so fascinating that once one begins to read this volume one is loath to stop until he has gone through it from cover to cover. The more one learns of psycho-analysis from books such as this the more does he appreciate the immense practical importance of psycho-analytic methods in the cure of abnormal mental conditions. For physicians, in particular, this book ought to be especially valuable. Those who already are interested in this subject should not fail to get this new volume. Those who do not yet know about psycho-analysis and what it means have a good opportunity of finding out by reading and studying this new book.

CLINICAL TUBERCULOSIS. By Francis Marion Pottenger, A.M., M.D., LL.D., Medical Director, Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, Calif.; Professor of Diseases of the Chest, College of Physicians and Surgeons, Medical Department, University of Southern California, Los Angeles. With a chapter on Laboratory Methods, by Joseph Elbert Pottenger, A.B., M.D., Assistant Medical Director, and Director of the Laboratory, Pottenger Sanatorium for Diseases of the Lungs and Throat.

Vol. I. Pathological Anatomy, Pathological Psychology, Diagnosis and Prognosis. With 105 Text Illustrations and Charts, and Six Plates in Colors.
Vol. II. Complications and Treatment. With 62 Text Illustrations and Charts, and Four Plates in Colors. Cloth, \$12.00 net. St. Louis, C. V. Mosby Company, 1917.

An idea of the scope of this new work on tuberculosis may be gained from what the author says in his introduction, that he has attempted to present the study of tuberculosis from the standpoint of internal medicine in its broadest sense. The observations he has made in his twenty years of clinical study of patients affected with tuberculosis are recorded in this two-volume monograph, and the manner in which these observations are presented indicates beyond all doubt that the author knows and understands that disease fully enough to be ranked as one of the present-day foremost authorities on the subject of clinical tuberculosis.

As its title indicates, this is a work in which the clinical aspects of tuberculosis are emphasized. The author states that his "viewpoint is that of the clinician," and that he has aimed to make the presentation of this subject "as practical as possible."

That side of pathology which deals with altered or perverted function, functional pathology, the importance of which is being appreciated more and more as our general knowledge of disease increases, is discussed here more extensively than the other side of pathology, the anatomical side or pathological anatomy. Yet this latter side of the subject is given, in both the text and number of illustrations, all the attention it ought to get in a clinical monograph such as this.

The nervous system in tuberculosis is discussed more extensively than in any other book in the English language on clinical tuberculosis of which we know. The study of "phthisiogenesis" is discussed in a fascinating way, embodying all the generally accepted principles of infection and immunity as it relates to this disease. The subjects of fever and anaphylaxis are discussed carefully and quite fully. Physical examination is given in detail. The chapters

devoted to that are among the most important and most valuable in this book.

Laboratory methods in the diagnosis of tuberculosis are given fully and admirably in a special chapter. Had the author of this chapter included the complement-fixation test for tuberculosis his discussion would have been quite complete. Already enough work has been done along this line and the interest in it is so general that a discussion of this subject should not have been omitted altogether.

On page 122 we found the name of the well-known Swiss anatomist Peyer spelled "Pyre." It struck us as rather extraordinary.

This new work of Pottenger's is a distinct addition to medical literature. He has produced a work that can and will rank among the best books on clinical tuberculosis to be had up to the present time. It is particularly suited to meet the demands of the general physician and student as well as the internist and the specialist on tuberculosis.

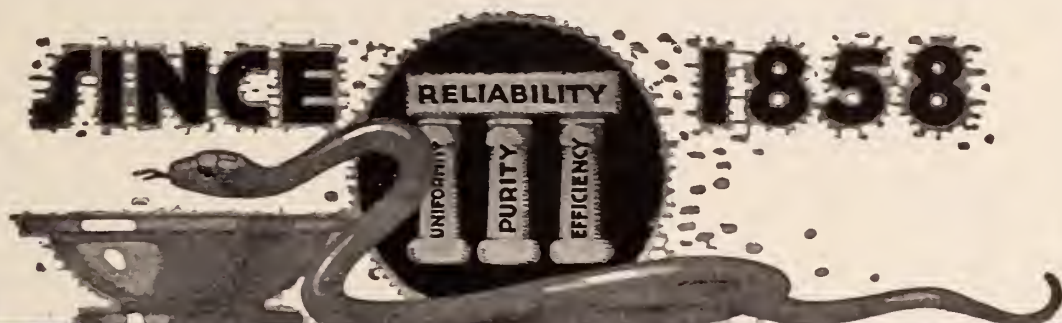
REPORT FROM THE PATHOLOGICAL DEPARTMENT AND THE DEPARTMENT OF CLINICAL PSYCHIATRY OF THE CENTRAL INDIANA HOSPITAL FOR INSANE, Volume 6. By George F. Edenharter, M.D., Superintendent.

Most practitioners and students of medicine in Indiana have a very vague idea as to the kind and amount of scientific work done at the Central Indiana Hospital for the Insane, and this sixth annual report, covering nearly 700 pages, will be found most interesting and instructive. A careful reading of the report should arouse more active interest in the problems that confront those who are given the responsibility of caring for and treating Indiana's insane.

The volume contains a number of very interesting and instructive addresses and clinical lectures delivered before medical students and physicians, and these alone place the volume on the plane of a textbook, though the publication of the papers are a part of the plan of the management of the hospital to increase the interest of the medical profession in the importance of the work as it affects the general welfare of the citizens of the state. The causes, means of prevention, and treatment of mental diseases are most important as pertaining to the general welfare, and there is a necessity for a systematic clinical training of the student of medicine in the principles of psychiatry.

The medical profession should give its unstinted approval of the policy adopted of making the Central Indiana Hospital for Insane a teaching hospital, for in no other way is it possible to acquaint the medical profession with the scientific phase of the work that is being done, for, as stated by the superintendent, "Hospitals for the insane, especially those supported by the state, should, for reasons economic as well as humanitarian, grasp the situation and encourage every effort on the part of the medical profession to engage in and become proficient in the diagnosis and treatment of diseases of the mind and nervous system."

The policy of the Central Indiana Hospital for Insane of making the hospital a teaching institution will furnish every community in the state with a number of practitioners especially prepared to render early and skillful assistance to those mentally affected; will provide a large number of graduates, fully qualified, from which to select hospital physicians, and will result in a saving of money to both the patient and the public.



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CONTENTS

ORIGINAL ARTICLES		EDITORIALS	
	PAGE		PAGE
Gastro-Intestinal Diseases along the Border. Frank W. Foxworthy, M.D., Indianapolis	225	Sputum Examinations in Pulmonary Tuberculosis.....	241
The Diagnosis of Maxillary Sinusitis. Joseph D. Heitger, A.B., M.D., Bedford, Ind.....	232	"Slackers" in the Medical Profession.....	241
		Only Real Doctors Serving in the War.....	242
		Immediate Duties of Medical Reserve Officers.....	243
		Inequitable Compensation Acts.....	243
		The Travesties of Education.....	244
		Editorial Notes	245

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS	PAGE	MISCELLANEOUS	PAGE
Indiana State Medical Association.....	256	Health Insurance for Workers.....	240
Indianapolis Medical Society.....	257	Deaths	249
Carroll County Medical Society.....	263	News Notes and Personals.....	250
Delaware County Medical Society.....	264	Correspondence	256
Delaware-Blackford County Medical Society.....	264	The Truth about Medicines.....	265
Madison County Medical Society.....	265	Book Reviews	267

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*No election held in 1915.

†No election held in 1916.

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ISSUED MONTHLY under Direction of the Council

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ORIGINAL ARTICLES

GASTRO-INTESTINAL DISEASES ALONG THE BORDER *

FRANK W. FOXWORTHY, M.D.

Major and Chief Surgeon, Indiana National Guard; Late
Major Surgeon, First Indiana Infantry

INDIANAPOLIS

The Civil and Spanish-American wars have shown a high percentage of gastro-intestinal diseases. The Medical Department of the U. S. Army has been working strenuously to lower the percentage of this class of diseases. As prophylaxis will reduce this character of diseases to a minimum, the following measures were used by the medical department of the Indiana National Guard during its service on the border:

1. The appointment of high class physicians for surgeons of the Indiana National Guard. In this we were aided by the adjutant general and the governor of the state, although tremendous pressure was brought to bear on us to appoint physicians who had more knowledge of politics than of medicine. This pressure became so great at one time that it was necessary for Major Carter, former chief surgeon, and myself to have a conference with the governor, and reiterate our determination that no physician should be commissioned and sent to the border without passing a thorough examination, both physically and mentally. This was done in every case but one, and that case occurred just as we departed, and the applicant was allowed to take a further examination.

2. Proper food and proper cooking of the same are an essential prophylaxis against gastro-intestinal diseases. I am happy to say that the food furnished the Indiana troops at Fort Ben-

jamin Harrison and also along the border was as a whole most excellent. Some little trouble was had at one time when the camp bakeries were first put in operation in producing a first-class quality of bread, the bread furnished us being too moist, but as soon as Captain Coleman of the quartermaster's corps began his work, the quality of the bread improved markedly. The meat furnished was excellent, but the problem of keeping fresh meat in the tropics will always be unsolved on account of the difficulty of always having ice on hand. As an illustration of the above, I submit the following letter from Maj. C. E. Pruden, surgeon of the Third Minnesota Infantry, whose camp was located next to the First Indiana Infantry. Their regiment suddenly had an enormous number of serious cases of ptomain poisoning, developing in one day. Quoting from Major Pruden's letter: "The committees appointed to investigate the epidemic found it was due to the following, in the order of importance: First, hash, containing contaminated tomatoes and allowed to remain in a pan unused for a day, producing bacterial putrefactive ptomains. Second, tomatoes, the cans all showing bacterial putrefaction. (Our regiment was the only one supplied with this issue at the mobilization camp, as they were travel rations unused.) Third, lowered resistance powers of the men, due to the rapid change in climate, and the excessive amount of fatigue duty exacted of them in the start."

While it is true that the Indiana troops were furnished with first-class food, they were not furnished with first-class cooks to cook the food, nor first-class containers in which to keep the food. Even the best of cooks could not prepare meals with the equipment furnished the First Indiana Infantry on its trip to the border. In several cases ordinary freight cars were given the men to be used as kitchen cars. The jolting of the average freight car when lightly loaded, as it is for a kitchen car, is such that coffee can-

* Read before the Indianapolis Medical Society, Jan. 16, 1917.

not be prepared nor bacon fried. Against this condition I protested to the Surgeon General direct, as well as the crowding of the men into old day coaches which would lower their resistance powers on a long journey. I was backed up in this protest by the unit commanders at Fort Benjamin Harrison and the governor of the state. For making this protest, I was reprimanded by the general commanding the central department at Chicago, who seemed to



Regimental Infirmary of the First Indiana Infantry. Note the mud in front, and the lack of shade from the mesquite trees.

think that any old equipment was good enough for the Indiana troops. In some instances, this old equipment was shelved at St. Louis, the colonel of the First Indiana commandeering Pullmans and baggage cars in the St. Louis yards and transferring the men to them. Our system is lamentably weak in the kind of food and the preparation of the same for troops on long railroad journeys. For short trips, I have made use of the fireless cooker with excellent results, but for long trips new methods should be devised to furnish the troops with adequate kitchen cars. After reaching the border, we had much trouble with the proper cooking on account of the inexperience of the cooks. The selection of cooks, although a most important matter, was often made without any regard as to whether the men knew how to cook. Such cooks gave the medical department a large amount of work. At one time this condition was so bad that I recommended to the camp commander, Gen. E. M. Lewis, that if possible Regular Army cooks should be secured to teach the Indiana National Guard cooks how to prepare rations. This was eventually done.

3. Prophylactic vaccines have decreased intestinal diseases wonderfully. I refer more especially to the typhoid prophylaxis. Many of the Indiana National Guard had already taken the vaccine, but as soon as the call came, I made arrangements with Dr. Will Shimer, superin-

tendent of the State Bacteriological Laboratory, to supply us with ample vaccine for the whole guard. At his suggestion, a strain of Paratyphoid B was introduced, with the typhoid vaccine, and most of the guard got their first and second doses of this. I was prevented from giving the third dose of it by Lieutenant-Colonel Bannister of the Medical Department of the U. S. Army and his assistant, Dr. T. V. Keene, first lieutenant Medical Reserve Corps, as they thought the reaction was too severe, so the third dose was given from government vaccine. However, the first two doses were sufficient to prevent any paratyphoid in the Indiana troops, although it was in epidemic form a short distance from our camps. I take this method of showing my appreciation of Dr. Shimer's suggestion that it be used, as I believe it has prevented a great deal of sickness.

4. Proper medical supplies are often essential in aborting an attack of gastro-intestinal diseases. In order to thoroughly equip the medical department with ample medicines, I purchased nearly \$1,000 worth of drugs for use in mobilization camp, en route to the border, and for the first few weeks after reaching there. Each train that left Fort Benjamin Harrison was provided with a surgeon, several members of the hospital corps, and sufficient medical supplies to take care of any ordinary disease that might suddenly occur. Having in mind a case



"The Casa Blanca" at Llano Grande, Tex. For several weeks the only hospital for the Indiana troops along the Border.

occurring on my own train during the Spanish-American War, in which one entire company had ptomain poisoning I saw to it that each train had plenty of Squibb's diarrhea mixture and similar medicines. This, I believe, aborted an incipient epidemic of ptomain poisoning in Company H, shortly after the First Indiana reached the border. In this connection, I might mention that the medical department of the Indiana troops was better supplied with medicine and equipment than any of the state

Name	Boiled Potatoes	Biscuits	Syrup	Stewed Onions	Prunes	Cold Boiled Beef	Bacon
Capt. Baker, D & C...	No	2	Yes	Yes	No	No	Yes
1st Lt. Nichols, O. K...	Yes	1	Yes	Yes	No	No	No
2d Lt. Turner, D & C...	No	2	No	Yes (2)	Yes (2)	?	Yes
Ralph Hostetler, D only	No	2	No	Yes	Yes	No	No
Clarence Scott, D slight	No	2	Yes	No	Yes	Yes	Yes
Jno. D. Moorman, D...	No	2	Yes	No	No	No	Yes 2
Serg. A. E. Hatton, D & C	Yes	1	No	Yes	Yes	Yes	Yes
Albert Miller, D only	Yes	2	No	Yes	Yes	Yes	Yes
Ralph Good, D & C...	Yes	3	Yes	Yes	Yes	Yes	Yes
Clinton Short, D	Yes	2	Yes	Yes	No	No	Yes
Claude Rodgers, D & C	No	2	Yes	No	No	Yes	No
George Lucas, D slight*	No	2	Yes	No	No	No	No
Hugo Roseman, D & C	No	2	Yes	No	No	No	No
Henry Stevenson, D & C	No	2	No	Yes	No	Yes	Yes
Chas. Humphrey, D & C	Yes	2	Yes Honey	No	No	No	Yes
Floyd Turnbull, D & C	No	2	Yes Syrup	No	No	No	Yes
Chas. Cooper, D & C...	Yes	2 Peanut Bar	No	Yes	Yes	Yes	No
Homer Mullen, D & C	No	0 Biscuits	In prunes syrup	No	No	No	Yes 2
Alvin Newburn, D & C†	Yes	3	Yes honey	No	No	No	Yes
Harry Seibert, D & C	No	2	Yes syrup	No	No	No	Yes
Earl Collins, D & C...	No	2	Yes	Yes	Yes	Yes	No
Carl Marks, D & C...	Yes	2	No	Yes	No	Yes	Yes
Kenneth Thomas, D & C	No	2	Yes	No	No	No	No
Chas. Bolf, D & C...	Yes	1	Yes	Yes (2)	No	No	No
John Brems, D only...	Yes	2	Yes honey	No	No	No	Yes
Henry Harris, D only...	No	2	Yes syrup	No	Yes	No	Yes
Glen Stilson, D & C...	No	2	Yes	No	Yes	Yes	Yes
Geo. Mayfield, D & C...	Yes	1	No	No	No	Yes	No
Oll D. Hepner, D & C	Yes	1	No	No	No	Yes	No
Arthur Hohart, D — Cramps for several hours	No	2	No	No	Yes	No	Yes
Carl Beery, D only...	Yes	2	No	Yes	Yes	Yes	Yes
Chas. Applegate, D only	Yes	2	Yes	Yes	Yes	Yes	Yes
Everett Casper, D & C	No	2	Yes	Yes	No	No	Yes
Jas. H. Forbes, D & C	Yes	2	Yes	No	No	Yes	Yes
Everett Orr, D & C...	No	2	Yes	Yes	Yes	No	Yes
Jas. P. Neville, D & C	Yes	2	No	Yes	Yes	No	Yes
Herman Klukas, D & C	Yes	2	No	No	Yes	Yes	Yes
Wm. P. Barrett, D only	Yes	2	No	Yes	No	Yes	Yes
Clarence Martin, D slight and headache...	Yes	1	No	No	Yes	Yes	Yes
Add Stevenson, D only	Yes	2	No	No	Yes	Yes	Yes
Glen Follick, D only...	No	2	Yes	Yes	Yes	Yes	No
Jacob Sellars, D & C...	Yes	1	Yes	No	No	Yes	Yes
Tracey Havens, D only	No	2	Yes	Yes raw	Yes	Yes	Yes
Herold Daniels, D only	Yes	5	Yes	Yes stewed	Yes	Yes	Yes
Virgil McCormick, D slight	Yes	2	Yes	Yes	Yes	No	Yes
Fred Canan, O. K...	Yes	2	Yes	No	Yes	Yes	Yes
Roy Lucas, D only...	Yes	2	Yes	Yes	Yes	Yes	Yes
Heber Bonner, D & C...	No	3	Yes	Yes	No	Yes	Yes
Geo. Hart, D & C...	Yes	2	No	Yes	No	No	Yes
Wm. Sherin, D & C...	Yes	2	No	Yes	Yes	Yes	No
Chas. Fout, D & C...	Yes	3	Yes	Yes	Yes	No	Yes
Allen Peck, D only...	Yes	1	No	No	Yes	No	No
Wm. Thomas, O. K...	Yes	2	Yes	No	No	Yes	No
M. Tonahill, O. K...	Yes	2	No	Yes	Yes	No	Yes
Dallis Solliday, O. K...	Yes	2	Yes	Yes	Yes	No	No
Ross Connor, O. K. bowels loose	Yes	1	No	Yes	No	Yes	No
Cecil Jackson, O. K. has constipation, took C. C. Pill 7/26/16...	Yes	3	Yes	Yes	No	Yes	Yes
Dan Hostetler, D & C	No	1	No	Yes	No	No	No
Frank Allen, O. K...	Yes	3	Yes	Yes	Yes	Yes	No
Clarence Savery, D only	Yes	3	Yes	Yes	Yes	Yes	No
Robert Kreuter, D only	—	2	No	Yes	Yes	No	Yes
	38	59	33	37	33	33	37

3 Officers; 58 Men.

D=Diarrhea.

D & C=Diarrhea and Cramps.

O. K.=Has no attack of above troubles.

* Was late for supper, and ate lemon snaps.

† First biscuits eaten here.

troops with which we were brought in contact, it being necessary for us to loan our medical manuals to the surgeons of the other state troops at Llano Grande. I have never understood why it was that a camp the size of the one at Llano Grande, which contained approximately a division, should not have been supplied with full medical equipment by the time we reached there.

5. Proper water supply is necessary to prevent gastro-intestinal epidemics. This we have had at Fort Benjamin Harrison and also en route, but after our arrival it was necessary to haul water for some distance, the water coming by canal from the Rio Grande River. Later, it was piped to all parts of the camp, but this did not render the water pure. Maj. F. C. Robinson of Martinsville, at that time surgeon of the artillery battalion, first called my attention to the enormous number of small white worms in the water, as well as much sand and vegetable débris. These worms were probably mosquito larvae. To render this water pure, it was necessary to strain and boil it. Later on, we began the use of the Lister water bag, which we found a great help. This is a large, circular, canvas bag, vulcanized on the inside and made to hang by several ropes to the limb of a tree or to the ridge pole of the tent. Near the bottom of this bag there were five automatic faucets. In the water was put the contents of a small tube of hypochlorite of lime, which after several hours would render the water free from infection. These bags also made the water much cooler.

6. The proper disposal of excrement and garbage is very essential. At Fort Benjamin Harrison the garbage was burned in the post crematory. This was not satisfactory, as it required the use of garbage cans. At Llano Grande there was difficulty at first to procure sufficient stones and bricks to build the incinerators. However, some very creditable incinerators of mud were used at first, and eventually a uniform incinerator was built of brick, to which an iron chimney was added, and which was sufficient to take care of all the liquid and the solid garbage.

The latrines were deep pits covered by wooden boxes which we had carried with us from Fort Benjamin Harrison. These boxes were rendered as fly proof as possible, and later on new ones were built of even better construction, and fly traps were placed in each latrine. These pits were burned out daily by the use of straw, hay and crude oil. It was unfortunate that we were not supplied with sufficient wire

screening at the start, for, although the government built us beautiful mess houses, it was several weeks before we had ample wire screening to screen them. This, of course, increased the number of flies markedly. Every effort was made to prevent the increase of flies and mosquitoes, large quantities of crude oil being used for that purpose.

7. The proper housing of the men is needed. Unfortunately, quite a large number of the men of the Third Indiana Infantry for weeks had to sleep in the small shelter tents, which undoubtedly caused an increase in their gastro-intestinal diseases. These tents were not sufficient protection against the intense heat of the sun nor the excessive rainfall. The infirmary of this regiment had no tentage, but Major Carter and myself loaned them sufficient in which to do business. Under the present army scheme, there was no provision made for taking care of the sick at the regimental infirmary. Consequently, every case of gastro-intestinal disease that required special food and special attention was sent to the camp hospital. This camp hospital was started by Capt. A. G. Chittick of Frankfort, of Ambulance Company No. 1, in an old house known as the Casa Blanca, or the "White House." This was a two-story, rambling affair, and had probably twenty small rooms in it, with two verandas. It was badly out of repair, and Captain Chittick had nothing with which to start a hospital, excepting the usual ambulance equipment. As soon as the First Indiana Infantry reached the border, I was glad to place at Captain Chittick's disposal sufficient bedding units to take care of the sick, and only a few days later, when Major Carter arrived, a camp hospital was put in operation. Major Carter was hampered by outsiders complaining of conditions in the hospital over which he had no control, as there was no equipment or supplies sent previously to this point for the establishment of a camp hospital. Instead of having four field hospitals for one division, there was only one field hospital completely equipped for this purpose. Consequently orders were issued by higher authorities to forward all sick having temperatures of 101 F., and all others requiring hospital treatment, to the camp hospital at Brownsville. This was done for some time, the trains being very irregular and often behind time, and no special equipment being furnished on which to transport the sick. Conforming to this order, I sent a patient with acute appendicitis to Brownsville, and was much surprised to have him returned to me the next day with-

out any treatment being used. Also, I was informed of other cases of similar nature being returned at the first opportunity from this same hospital, and that the sick there did not have sufficient to eat. Taking this matter up with the division commander, General Lewis, he suggested that I make a visit to the hospital at Brownsville in order to gather information for him. This I did once, and found that a new hospital was being constructed at Brownsville, having 160 beds, but with 230 sick trying to occupy them. There had been insufficient covering for the sick and insufficient food supplied to them. One of the ward surgeons informed me that he thought any man sick enough to be in the hospital should be on a liquid diet. This was rather hard on some of my men whom I sent there to be operated on for ingrowing toenails. On reporting on the condition at Brownsville, General Lewis had orders issued retaining all of our sick at Llano Grande, and I understand a complete and fully equipped camp hospital is now in operation there.

8. Proper instructions and orders are most important in the prophylactic treatment of gastro-intestinal diseases. This was done by the medical officers giving talks to the different companies, and orders were issued at various times, such as the following, which was the first sanitary order issued at Fort Benjamin Harrison. I quote the portion relating to gastro-intestinal diseases:

HEADQUARTERS INDIANA NATIONAL GUARD,

Ft. Benjamin Harrison, Ind.,

June 24, 1916

Extracts from General Order No. 2:

The following regulations for camp sanitation are published for the information and guidance of all concerned:

General Police.—At the inspections, especial attention will be given to the condition of the grounds, tents, kitchens, food, bathing facilities and latrines. The interior of the tents should be kept clean, the clothing, blankets and bedding will be exposed to the sunlight daily, weather permitting. Tents will be raised during the daytime, in good weather, and will be adequately ventilated at night. All tents will be furled and struck occasionally.

Kitchens.—All food and water in camp will be protected from dust, flies and sun. An eating place will be designated for each company, and men will not be allowed to take food into their tents. Eating utensils will be thoroughly

cleaned immediately after using. Garbage, until destroyed in kitchen crematories, will not be allowed to accumulate around the kitchen. In all cases the kitchen refuse should be thrown on the incinerator at once. The throwing on the ground of water from the kitchen or water in which eating or cooking utensils have been washed is prohibited. (The use of garbage cans will not be permitted.) Water barrels, cans or bags for drinking water will be kept securely covered and set on a framework so as to have the faucets 3 feet from the ground. Water will be taken from the barrels or cans in no other way than by drawing it from the faucets.

Food and Drinks.—No foods, drinks or like commodities will be sold in camp except in the authorized exchanges.

Water Supply.—The camp water supply is pure and wholesome. No sterilization of drinking water is necessary. Precautions must be taken, however, to prevent subsequent contamination by keeping all containers scrupulously clean and protected from dust and other sources of infection.

Disposal of Excreta and Wastes.—Organization commanders will be held responsible for the police of their respective camps. Each company or similar organization will construct incinerators or crematories as prescribed by the camp surgeon, for the disposal of all solid and liquid garbage of the organization, and no other disposition will be made of such wastes. Human excreta will be disposed of in pits covered with latrine boxes. Two urinal cans will be placed in each company street at night. Latrine pits will be burned out and seats scrubbed daily. Crude oil and straw procured from the quartermaster will be used. Urinal cans will be burned out daily and the bottoms covered with milk of lime procured from the quartermaster before put in use. Defilement of the ground in or about the camp is absolutely prohibited. Manure will be hauled to a designated dumping ground, and there burned with the aid of crude oil. Rock pit crematories will be used for the disposal of general wastes of camp areas not under the jurisdiction of commanding officers. The incinerators for the disposal of garbage will be constructed as follows: A rectangular pit will be dug and lined with stones or bricks so that after its completion the inside dimensions will be 4 feet in length, 2 feet in width and 6 inches deep. This must be done immediately on arrival in camp before the garbage accumulates. All tin cans will be thoroughly burned

out and then flattened out to be hauled away. The cooks will be responsible for the care of these incinerators, and sufficient fire must be kept up in them at all times to take care of the garbage as it accumulates. They must not allow an excess of either liquid or solid garbage to be put in the incinerators at any one time.

Latrines.—Latrines will be constructed at the rate of one for each company, one for the officers of each regiment and one for the brigade headquarters. The pit shall be 3 feet wide, 8 feet long and 4 feet deep, and the excavated dirt shall be removed at least 4 feet from the pit. The latrine boxes must be fly proof, 4 feet wide, 9 feet long and 18 inches high, with sides sloping outward to prevent soiling. The top will have suitable holes cut at intervals of about 2 feet on center, each to be provided with a cover strongly hinged to the top. Through the center of the cover will be placed 6-inch strips and stop blocks to prevent the covers from being raised so far back that they will not fall back into position of their own weight. (For construction of latrine box, see blueprint furnished by the quartermaster corps, one of which will be on file at the office of the camp quartermaster.) Toilet paper will be furnished and kept from blowing about or lying on the ground, and a lantern will be kept burning in each latrine during the hours of darkness.

Personal Cleanliness.—Each soldier must bathe at least twice a week. Men must wash their hands thoroughly before each meal, and after going to the latrine. Bath-houses must be kept clean and inviting, and the water drained properly, both inside and outside.

Picket Lines.—Picket lines and places where horses are tied shall be kept thoroughly cleaned. In addition to carefully raking away of manure, the ground at picket line will be swept with suitable brooms at least three times a day and the manure piled. The manure shall be removed at least once a day. All picket lines will be burned off by the use of hay and crude oil at least once every ten days.

Sanitary Squads.—Sanitary squads composed of medical officer, noncommissioned officers and privates of the hospital corps, will be organized by the chief surgeon. The sanitary squad will be under the direct orders of the sanitary inspector of the camp. Civilians employed as sanitary laborers will be employed by the quartermaster's corps and turned over to the medical department. The sanitary officers will make requisition to the chief quartermaster of the camp for such transportation, labor or material

as may be needed. When assigned to this service they will not be diverted to other uses, except by orders from these headquarters.

By order of the brigade commander.

AUBREY KUHLMAN,
Colonel, Third Infantry.

Even more strict orders were issued after arriving at Llano Grande, making the major of each battalion responsible for the sanitation of his own battalion and making the surgeon responsible, to a certain extent, for any epidemic that might occur in his command. These orders were most stringent that, if there were more than a dozen cases of gastro-intestinal diseases occurring in one day in any regiment, the surgeon was expected to make a detailed report of the same before 10 o'clock the next day. This report had to be most complete, as is shown by the accompanying report on Company H of the First Indiana Infantry, which was made by myself, and for which I investigated and examined each individual of the company.

REPORT ON COMPANY H, FIRST INDIANA INFANTRY

LLANO GRANDE, TEXAS, July 27, 1916.

This organization was reported to me at 6:30 a. m., this day, as having suffered with diarrhea and cramps during the night. I find that at the noonday meal yesterday the menu was boiled beef, beans, potatoes, jam and bread. No one was ill during the afternoon. The evening meal was boiled potatoes, biscuits, syrup, stewed onions, prunes, bacon, boiled beef left over from noon, coffee and water.

The following conditions were present: Meat has been excellent. Ice supply very poor—less than 100 pounds until three days ago, and slightly over 100 pounds then per day.

Ice has been bought until recently.

Ice box too small and not well protected; no lining, half filled with candles and evaporated milk.

Ice did not last until supper.

Potatoes and onions had been carefully sorted.

Prunes, onions and potatoes had been thoroughly cooked.

Flour looks like second grade; does not smell mouldy.

Meat fresh, excellent quality. Usually get two forequarters to one hindquarter. Meat last night was from hindquarter.

Water has not been boiled as ordered. Cook states not sufficient utensils and stove space.

Biscuits have been used once or twice per day, some men complaining that they were doughy, others not. Attention called to Private Newburn, who states he had not eaten any biscuits before in camp until last night when he ate three.

There was no rise in temperature above normal, so the men were put in quarters.

Major Surgeon, First Indiana Infantry.

In taking up the prevention of gastro-intestinal diseases at such length, I have included many of the causes also. The Medical Department of the Regular Army insists that the regimental surgeons take extreme care to prevent diseases rather than to cure them, the curing being done at field and base hospitals. This is the reason why, at the beginning of our campaign, we had an unusually large number of inspections by members of the Medical Department of the Regular Army. At one time the inspections were so many, and the number of reports to be made so large, that it was hard for a regimental surgeon to have any time to look after the members of his own command that had become ill. Paper work has increased enormously since the Spanish-American War, and in some cases it was necessary to make seven copies of an official communication. This requires too many of the sanitary personnel on paper work, especially as there is no provision made for typewriter with the regimental infirmary.

In addition to the causes mentioned, undoubtedly will have to be mentioned the influence of canteens and regimental exchanges. Although the articles for sale at these places were under the inspection of a medical officer, at the same time a combination of simple foods and drinks when taken after an excessive physical exertion and in tropical climate often produces bad results, as it was found when a man would eat several dishes of ice cream, combining same with lemonade or ginger ale. The man with the wagon load of uneatable pies was present at first and caused considerable sickness until he was finally kicked out. The dealers in food supplies who had built shacks just outside of the camp also caused us some trouble in that regard until a daily inspection by the medical department was necessary to clear up this cause.

The influence of the climate in causing gastro-intestinal diseases must not be forgotten. The disastrous effects of drinking large quantities of even pure water, when overheated, are known, and much more serious effects are to be expected when the water supply is not pure. Following the rainy season, sand storms appeared, and many cases of irritation of the gastro-intestinal tract were due to the quantity of sand taken in with the food. These cases were usually cured in a short time by abstaining from food for a day or two, together with a dose of castor oil.

The following table taken from my records shows the gastro-intestinal cases in the First Indiana Infantry, from June 26 to August 31:

GASTRO-INTESTINAL CASES IN THE FIRST
INDIANA INFANTRY

June 26 to August 31:

Appendicitis	11
Gastritis	28
Hemorrhoids	10
Diarrhea and dysentery.....	120
Other cases	11
Total gastro-intestinal cases.....	180

These cases occurred during a period of sixty-seven days, but, as a portion of the regiment was not mustered in until July, the correct period would be nearer sixty days than sixty-seven. This would mean an average of three cases per day. These cases are the ones that were sufficiently ill to take them entirely off duty and put them in quarters or in the hospital. No record is kept of those gastro-intestinal cases that were on the sick report that were not severe enough to place the patient in quarters or in the hospital, or of those cases occurring on Sundays or holidays, when the patient would naturally not have any work to do, the endeavor being to keep the sick report as small as possible. During this time the strength of the command was approximately 880 men. Total number of cases treated, both medical and surgical, was 374. Of these, sixty-seven were surgical, leaving 307 medical, showing that nearly 50 per cent. of all the cases, medical and surgical, were gastro-intestinal cases, and nearly 60 per cent. of the medical cases were gastro-intestinal cases. The large number of appendicitis cases will be noted, but this can be partially explained by the fact that four of these cases were chronic appendicitis, the condition not being ascertained by the examining surgeons at Fort Benjamin Harrison. Diarrhea and dysentery are classified together, for, as mentioned before, the camp hospital at first was not equipped with sufficient personnel to do any fecal analysis, and the diagnosis of diseases was made purely from physical symptoms. This diagnosis also takes in the cases of ptomain poisoning.

* The present condition of troops on the border is better. Quoting from a letter from Dr. F. C. Robinson, at that time surgeon of the artillery battalion, he states: "The intestinal troubles seemed to all let up about September 1. You will be surprised when I tell you that up to October 20 I made out only two cards, and one of them for an accidental death. Once in a while, here and there, a case of diarrhea would pop up, and could usually be traced to a canteen stop or a drunk. I happen to recall one instance in the Indiana Signal Company where six diarrhea cases were thought to have been caused by bad

meat used in hash. Since the regular army cook instructors have made the rounds, I do not know of any gastro-intestinal outbreaks."

I also quote from a letter from Capt. Howard Snyder, surgeon of the Regular Army, in charge of the camp hospital at Llano Grande: "Have had no gastro-intestinal disturbances worthy of note since September 1."

Also I quote from a letter from Capt. R. H. Richards of Patricksburg, one of the surgeons of the First Indiana Infantry, dated Nov. 9, 1916: "As to gastro-intestinal diseases, I am not able to add any information to what you already know from your own experience, as there was a marked decline in such ailments after September 1, owing to our sanitary measures persisted in, which you instituted, the men's improved ability to care for themselves and the appearance of cooler weather. So far as I know, no cases of amebic dysentery occurred in camp."

The treatment of gastro-intestinal diseases on the border was the same as used in practice here at home, excepting that our medical supplies were often confined to the medical supply table of the Regular Army, and that the diet was modified according to what the surgeon in charge of the camp hospital could procure for his patients. Medical supplies, medical equipment, medical officers and hospital corps men, as well as proper food, were not in sufficient quantities at the beginning of our camp at Llano Grande, and it was weeks before we procured sufficient of all of the above named. It is to be hoped that in the future the Medical Department of the Regular Army will be so completely equipped that there will be no cause for criticism.

In closing, I wish to quote from a prayer written by an unknown private, but it shows the viewpoint of the enlisted men as to the cause of gastro-intestinal diseases along the border:

Show our officers how they can feed men and give them enough to eat on the 24 cents a day our government allows us.

We know it can be done—our Regular Army is proof of that—but clerks, salesmen, and floorwalkers, who are captains and lieutenants in these outfits, know not how to do it, and so we suffer for their ignorance, and while they get from \$150 to \$250 a month, we who are willing to fight for our country, little as we know how, get only \$15.

O, Lord, then we ask that Thou send us cooks who can cook, not factory men and chauffeurs who think they are cooks, and who bake our beans half enough; and bakers, send us, who can bake bread that does not weigh three pounds to the slice—wet and soggy.

Send us a quartermaster-captain who knows how to order supplies and when to order them, for we need food every day, O Lord, not three days a week.

THE DIAGNOSIS OF MAXILLARY SINUITIS

JOSEPH D. HEITGER, A.B., M.D.
BEDFORD, IND.

It is a well known fact that a wide variation exists in the tolerance of individuals to nasal disease. We have all seen cases where the nose is literally filled with nasal polypi, the compression being so great as to lead to deformity of the face and yet the patients do not complain of pain. Their symptoms are matters of obstruction alone.

On the other hand, we find cases in which the slightest pathologic change in the nasal cavities throws the patient into a condition accompanied with almost unbearable pain.

Between these two extremes many variations occur. Some of the cases may harbor grave pathologic conditions which cause no localizing symptoms and are, therefore, often overlooked during the life of the patient only to be brought to light at the autopsy.

All this variation teaches us that a great proportion of affections of the nose are often uncharacteristic and that a certain sufferance exists on the part of the patient leading almost to resignation when he thinks he has a "catarrh," which the public in the past has looked on as incurable, and which the patient must endure and carry with him to his grave.

These are just a few of the many things which call for a routine examination of the nasal sinuses and this may be said to apply especially to the maxillary sinus as I shall endeavor to point out.

The maxillary sinus is the largest and probably the most often affected of all the nasal accessory sinuses. It has the shape, roughly speaking, of a three-cornered pyramid with a base corresponding to the nasal wall and the apex at the zygomatic process. It is bounded medianly by the nasal fossa, above by the orbit, below by the alveolar process of the superior maxillary and in front by the canine fossa.

The outer wall is bounded by the pterygo-maxillary fossa and the upper back angle by the cranial cavity. The nasal wall and the floor of the antrum assume the greatest importance because of their significance in etiologic and diagnostic relations.

The clearest conception of the anatomy of the nasal wall of the antrum is to be gained by the description of Hajek¹ in which he takes the superior maxillary bone and successively builds up the nasal wall until the large

hiatus maxillaris communicating with the antrum is replaced by the small ostium maxillare. Extending upward from the large opening on the nasal surface of the superior maxillary bone is the frontal process which is separated from the nasal surface by a groove, the sulcus nasolacrimalis, which forms the foundation for the ductus nasolacrimalis. The upper edge of the large opening is formed by the edge of the orbital process, while below the alveolar process extends downward from the antrum. The palatal process assumes a horizontal position below forming a part of the floor of the nasal fossa.

On the inner surface of the nasal process of the superior maxillary two elevations are to be seen running horizontally the upper, inconstant, the crista ethmoidalis forming the attachment of the middle turbinate and the lower the crista turbinalis to which the lower turbinate is attached. These two elevations extend backward over the perpendicular plate of the palate bone affording further attachments for the turbinates. The perpendicular plate of the palate bone by its articulation with the superior maxillary forms a part of the nasal wall of the antrum and helps to close in the hiatus maxillaris posteriorly.

This opening is further reduced in size by the lower and middle turbinates, the uncinate process and the bulla ethmoidalis.

The points of greatest anatomic interest are the maxillary process of the inferior turbinate which closes the lower angle of the hiatus maxillaris, the pars membranacea which occurs between the palatal, ethmoidal and lachrymal processes of the inferior turbinate and several corresponding processes on the uncinate process and lastly the hiatus semilunaris which is the groove between the bulla ethmoidalis and uncinate process containing in its depths the ostium maxillare.

The ethmoid bone when fit into the nasal wall completes the anatomy necessary for a thorough understanding of antrum conditions, the bulla closing in the upper angle of the hiatus maxillaris. With the duplications of nasal and antral mucous membrane bridging over the spaces existing between the processes of the uncinate and inferior turbinate, the antrum becomes shut off from the nasal fossa except in the back part of the hiatus semilunaris where the ostium maxillare is to be found. In about 10 per cent. of the cases the above mentioned spaces are not completely bridged over, and we find, according to Zuckerkandl, one or two accessory openings which are usually located either

in front or behind the ethmoidal process of the uncinate. The same author calls this area the "nasal fontanelle," whereas the term usually applied is the pars membranacea.

The hiatus semilunaris assumes great importance because into it empty the openings of the frontal and anterior ethmoidal cells and the antrum. In the average case it is almost completely covered by the anterior end of the middle turbinate and its accessibility is determined by the configuration and structure of the middle turbinate which shows such wide individual variations.

If the middle turbinate reaches downward only a short distance and its curve laterally is slight, a good portion of the hiatus is visible and accessible to a probe. Should the opposite conditions maintain then the hiatus is closed and not visible and cannot be entered with a probe. An excessive development of the bulla may encroach on the hiatus, rendering the use of the probe almost impossible in sounding the antrum.

The possibility of sounding the antrum depends on the width of the hiatus and the depth of the ostium maxillare which lies in its posterior part. With excessive development of the bulla a blocking of the hiatus occurs as mentioned above. This is not often visible from an inspection of the nose which may be clear for breathing and even clear in the rima olfactoria.

The ostium maxillare which lies in the posterior part of the hiatus semilunaris is found under the orbital floor at the highest point in the antrum. With the head in the upright position the antrum must therefore fill before the secretion will drain into the nose except in those cases where accessory ostia are present. The ostium extends outward, downward and forward into the antrum and varies in shape, being elliptical, round and kidney shaped, and in size from 3 mm. in diameter and 19 mm. in length and 6 mm. in breadth. In the latter instance the whole hiatus would empty into the antrum.

It is to be readily seen that the difficulty in sounding the ostium maxillary does not arise in its small size, but rather in its deep lying and hidden position in the hiatus.

A knowledge of the anomalies of the floor of the antrum is essential because of its relations to the roots of the teeth and its great variations.

In general there are three types of antrum depending on the depth of resorption of the alveolar process in relation to the bottom of the nose determining whether the floor of the antrum lies in the same plane as the floor of the

nose, above it or below it. This causes a variation in the thickness of the alveolar roof. A thick alveolar process protects against a propagation of antrum infection whereas a thin one favors it. The process of resorption may cause an asymmetry of the antra producing on one side a deep antrum, on the other a very shallow one. Ordinarily the floor of the antrum reaches from the first to the third molar tooth and these are the ones usually concerned in the antrum troubles of dental origin.

When resorption of the alveolar process extends an unusual distance downward producing a deep antrum it is spoken of as an alveolar sinus.

In addition to sinus formation in the floor of the antrum anomalies of the other walls occur by resorption of bone or abnormal shrinkage of the walls of the antrum. As a result we have five types of sinuses in the antrum, namely, the alveolaris, palatinus, infra-orbitalis, zygomaticus and orbitalis, the latter being located above and posteriorly in the orbital process of the palate bone.

The diminution or shrinking in size of the antrum is of considerable importance in probe puncture and operative procedures, and is due to a sinking in of the facial wall or outward dilatation of the nasal wall or a combination of both of these conditions. It is often associated with facial asymmetry when one side only is involved.

Another anomaly of considerable importance and interest is the existence of a vertical septum in the antrum dividing it into a posterior and an anterior portion. When this occurs the anterior division drains into the middle meatus and the posterior into the superior meatus. Disease in this posterior part is likely to be confused with disease of the posterior ethmoid cells and the sphenoid sinus. The existence of a horizontal partition in the antrum has been reported by Zuckerkandl, but its rarity calls for only a mention of the fact.

The anatomical position of the antrum produces a double source of infection, nasal and dental. In former years the latter was given predominance, but in recent years with the increase in our knowledge of rhinology the nasal source has come forward as the most important etiologic factor. Zuckerkandl² in three hundred sections found only one case of dental origin. Härke³ and E. Fraenkel⁴ claim that dental origin is rare. From the investigations of B. Fraenkel,⁵ Chiari,⁶ Killian,⁷ Grünwald,⁸ Hajek,⁹ Zarniko,¹⁰ Coakley¹¹ and Richards,¹² dental origin of antrum infections occurs in only a

small percentage of cases. Hajek found twenty true cases of dental origin in 250 cases of antrum suppuration.

An acquaintance with the general etiology of antrum disease is a great help in obtaining an accurate history and interpreting properly the essential points in it. We have the cases of genuine inflammation and inflammation as a result of extension of which those of dental origin lead followed by those due to trauma, lues, tuberculosis and tumors. The cases of genuine inflammation are usually of nasal origin and are for the most part of bacterial origin in which the influenza bacillus plays the most important rôle.

The different forms of dental empyema classify themselves into two general groups, namely, the acute and chronic inflammatory changes of the tooth roots and alveolar region.

The acute class is further subdivided into (1) the acute root abscess; (2) acute periostitis, and (3) the circumscribed or diffuse osteitis of the alveolar process. The acute root abscess develops following an acute inflammation of the dental periosteum which is caused by a pulpitis dependent on dental caries. With a deep antrum and a well developed sinus alveolaris the abscess ruptures into the antrum. Such a case begins with a toothache and tenderness of the offending tooth. The tooth seems elongated and periosteal swelling occurs in the alveolus. Suddenly there is a discharge of foul smelling pus from the nose and the pain usually lessens. When such a tooth is extracted a sound can be passed into the antrum.

In acute periostitis we usually have to deal with a periosteal abscess from dental caries. The abscess either ruptures into the antrum or simultaneously into the antrum and to the outside. In the latter case we can get an antrum fistula. The extraction of a tooth often conditions an antrum suppuration by opening and infecting the antrum. The opening of the antrum is not the sole cause, but the opening associated with a pre-existing periosteal abscess.

Numerous cases have been reported in the literature where following dental caries, trauma or osteomyelitis of the superior maxillary, a part of the alveolar process became infected, thus involving the antrum. Following the removal of the sequestrum these cases usually heal.

The chronic inflammatory changes fall into four general classes: (1) the chronic periodontitis; (2) cases of extension through the alveolar process from an inflamed tooth root; (3) development of antral empyema following den-

tal work, and (4) rupture of a purulent inflamed maxillary cyst. In chronic periodontitis following pulpitis a thickening of the dental periosteum occurs which sits on the point of the dental root. From this there may develop a so-called granuloma or a purulent root cyst. The latter is to be differentiated from a tooth cyst and maxillary cyst. A diseased tooth, even though the root is some distance from the floor of the antrum and without any manifest inflammatory signs, can be the cause of an antrum empyema by infection wandering through the alveolar process as especially pointed out by Hajek.

Cysts of the antrum are more likely to break through into the mouth but they may rupture into the antrum.

Trauma, lues and tuberculosis of the superior maxillary are rare and usually point the way to diagnosis.

Having made a survey of the pathology of dental etiology a review of the pathologic anatomy of the mucous membrane of the antrum would be in order. These pathologic changes may be classified as follows: 1. The different forms of inflammatory changes in the mucous membrane. 2. The inflammatory antral tumors and hydropsantri. 3. Maxillary cysts. Dmochowsky¹³ divides the inflammatory changes of the mucous membrane of the antrum into acute and chronic catarrhal and hyperplastic and acute and chronic suppurative and diphtheritic types.

Edema plays the greatest rôle in the acute and chronic catarrhal forms and this deserves especial emphasis. In the acute type a cellular infiltration of the upper layers occurs, the epithelium being little changed and the edema exists in the connective tissue interstices.

In the chronic catarrhal form exudation occurs in the deeper layers to such an extent that the mucous membrane may be ten to fifteen times thicker than normal. Edema occurs as in the acute form and the cell infiltration is limited to the subepithelial layer and the region of the ducts of the mucous glands. In the hyperplastic form the degeneration of connective tissue produces compression of the ducts of the mucous glands resulting in the formation of small cysts. The extension of the inflammation to the periosteal layer produces eventually osteophytes and osteomata. In acute empyema the mucous membrane is not so swollen as in the catarrhal forms blood infiltration often taking the place of the serum.

In chronic empyema the same changes are

found as in the chronic catarrhal with a difference in the character of the secretion.

Bony changes of any of the walls may complicate the empyemata, resulting in rupture which is very dangerous when it occurs through the posterior wall because of cerebral complications and phlegmon of the pterygo-palatine fossa. Rupture through the nasal wall and floor is harmless.

The inflammatory antral tumors include antral cysts, polypi, stone formation in the antrum and hydrops antri.

Maxillary cysts form in the alveolar process and are more of interest in their association with disease and differential diagnosis.

The symptomatology of antrum disease may be very manifest in some cases, while on the contrary it may be very obscure, all of which again emphasizes the importance of routine methods of diagnosis.

We may speak of subjective and objective symptoms which differ in the acute and chronic types of disease.

The subjective symptoms may be further divided into local and general symptoms.

Pain as a local symptom is present as a rule in the acute cases associated with nasal infection and in those cases of dental origin accompanied with periostitis. In most cases of chronic antral disease pain is absent except in acute exacerbation.

Discharge from the nose is a frequent symptom, particularly in the chronic forms of disease. Patients may complain of only a chronic cold and say little about the discharge in the chronic cases especially when it is of a mucous character. Again there may be no flow of secretion from the nose and the complaints are of symptoms in the larynx and throat. Lateral pharyngitis especially of one side should arouse suspicion regarding the antra. Where polypoid tissue exists in the middle meatus or at the anterior end of the middle turbinate, the secretion has a tendency to drain backward which is further favored by the position of the accessory opening if one exists.

Among other subjective symptoms may be mentioned subjective foul odors, disturbance of the sense of smell with even loss of this sense, and vasomotor obstruction of the nose due to the effect of the secretion on the mucous membrane of the nose. The slight discharge of antral disease may be the cause of an eczema of the anterior nares leading to fissures in the mucocutaneous junction, and in elderly people predisposing to attacks of facial erysipelas. Conditions of overirritability and depression

constitute some of the general subjective manifestations often leading to the diagnosis of general neurasthenia and melancholia.

The most constant of the objective symptoms of antral disease is the presence of a purulent or mucopurulent secretion in one or both nasal fossae especially in the middle meatus, and this has been the sheet anchor of diagnosis. Anterior rhinoscopy is not always enough to detect this condition and in those cases where the secretion is small in amount, drainage being favored posteriorly, it will only be revealed by posterior rhinoscopy and the Holmes nasopharyngoscope, aided by suction. Repeated examinations are often necessary before a negative report can be taken as a certainty.

Very often anterior rhinoscopy will reveal atypical hypertrophies in the middle meatus. This is not characteristic of antral infection, but is also associated with disease of the anterior ethmoid cells and frontal sinus.

The mucous membrane of the middle meatus about the region of the ostium is affected first; namely, the mucous membrane of the concave surface of the middle turbinate, of the uncinate process and the bulla especially without the rest of mucous membrane of the middle meatus and nasal fossa being involved. This is the more striking because in genuine disease of the mucous membrane of the nose, hypertrophy as a rule begins on the convexity of the middle turbinate, extending all over the nasal fossa and eventually leading to hypertrophy and polyp formation.

The hypertrophy associated with antral disease in general takes two forms, in the first of which the hypertrophy on the concavity of the middle turbinate and that on the bulla opposite approach each other in such a way as to give the appearance of a double middle turbinate. In the second type the uncinate process appears to be involved more, giving the appearance of a lateral swelling of the mucous membrane.

Swelling of the cheek is more noticeable in those acute cases associated with influenza and erysipelas, whereas the so-called "fleeting edema" may be encountered in chronic antral empyema.

I have purposely gone into great detail regarding normal and pathologic anatomy and the obscurity and variety of symptomatology to emphasize what a big problem confronts us in making a proper diagnosis of antrum disease.

Having all these facts at our disposal how are we to arrive at a diagnosis of suppurative or nonsuppurative maxillary sinusitis?

As I have already stated the most constant

symptom in the suppurative type is the presence of pus. Having cleaned the nose of pus if pus again appears after a short time in the middle meatus, we are dealing with a suppuration of the antrum, anterior or middle ethmoid cells or the frontal sinus or a combination of these sinuses. In the upright position the anterior ethmoid cells and frontal sinus are draining all the time because their openings are located at the most dependent portion of these sinuses, whereas the opening of the antrum being located at the highest point necessarily causes a periodicity in drainage except in the presence of hypertrophies and polypi. The position of pus in the middle meatus carries nothing diagnostic with it because hypertrophies may divert the flow and a narrow and deep hiatus semilunaris may act as a syphon on the secretions of the antrum.

We have besides the positional tests based on the above principles several aids to assist us, the chief of which are washing out the antrum through the natural opening, probe puncture of the antrum, transillumination of the antrum and the radiograph.

In only a small percentage of cases is it possible to wash out the antrum through the natural opening due to certain anatomic conditions already enumerated.

The surest method is probe puncture either in the inferior meatus through the thinnest portion, the maxillary process of the inferior turbinate whose position has already been given or in the pars membranacea. Because of a possible fusion of the orbit and the nasal wall of the antrum, the latter position is not without great danger.

Having punctured the antrum and washed out the pus if pus should again appear at the end of a half hour, the question arises as to its source. The antrum could not refill in so short a time. Therefore, it must come from the ethmoid cells, the frontal sinus or a divided antrum, the significance of the latter having been explained.

We next attack the frontal sinus as we have some variety of combined empyema with which to deal.

It is as a rule necessary to remove the anterior end or all of the middle turbinate and any tissue proliferations present and later probe and wash out the frontal sinus when the hiatus semilunaris has had a chance to heal and allow the passage of a probe. If after both antrum and frontal sinus are washed out pus again appears in the middle meatus, we may be sure that the pus is coming from the anterior or

middle ethmoid cells, the infundibular cells if they are developed or perhaps from a connecting frontal of the opposite side or a divided antrum. Properly taken radiographs will assist in reaching a conclusion regarding these two latter conditions. Later the pus must be followed to its source.

In addition to the above conditions in differential diagnosis, others come to the front among which are: 1. Pyosinus maxillaris in which the antrum acts as a reservoir for pus from disease of the ethmoid or frontal. 2. Collection of serous fluid in the antrum which is probably due to cyst formation in the mucous membrane following a chronic empyema. 3. Maxillary cysts associated with changes in the bony walls, especially in the canine fossa where parchment like crepitation exists on pressure. Small cysts which do not lead to dilatation of the antral walls may remain undiagnosed for a long time. 4. Osteomyelitis of the superior maxillary in addition to that associated with dental caries of which there are three types; namely, (a) that following phosphorous poisoning, now fortunately seldom seen; (b) necrosis following the infectious diseases such as typhoid, scarlet fever, measles, and (c) idiopathic osteomyelitis, the latter occurring especially in infants and children in which an antrum is not well developed. 5. Malignant neoplasms of the antrum. 6. Tuberculosis of the antrum, the latter involving especially the infra-orbital process and the medullary tissue of the superior maxillary in infants leading to abscess and fistula formation of the lower lid, swelling of the superior maxillary, thickening of the palatal process and finally suppuration in the nose.

From the above it is to be seen that the diagnosis of maxillary sinusitis may become quite a complicated affair and not only days but weeks may be necessary to complete a diagnosis, especially when combined with involvement of the sinuses of the first series.

Such diagnoses made at one sitting should be taken "cum grano salis."

Our greatest aids in routine diagnosis, as have been enumerated, are probe puncture and washing of sinuses postural tests with and without suction, transillumination, the Roentgen ray and the Holmes nasopharyngoscope introduced into the antrum through an enlarged puncture opening. The Roentgen ray will outline the size and shape of the antrum, determine the position of the antral floor and the relations of the teeth to it and assist in establishing involvement of other sinuses in a combined empyema. Shadows of old healed antral disease may persist and lead

to error. The surest method of all, however, is probe puncture and washing which will give positive results in both suppurative and non-suppurative cases except in the presence of a divided antrum.

Involvement of the antrum is often overlooked because of a lack of the application of the knowledge herein contained and failure to apply routine methods of diagnosis.

The work of Tunis¹⁴ in which one hundred miscellaneous heads examined in the autopsy room produced thirty-seven cases of unrecognized antral disease teaches us the lesson that it is so easy to overlook collections of pus in the antra and that a fatal result may frequently follow a neglect of this condition.

McNaught¹⁵ again brought this lesson home to the profession at the meeting of the American Medical Association in San Francisco last year.

No examination of obscure conditions in the nose should be considered complete until the antra are punctured and washed out, and he who makes the most punctures will make the proper diagnoses.

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DISCUSSION

ON PAPERS BY DR. MAURER* AND
DR. HEITGER

DR. M. RAVDIN, Evansville: The first essayist has taken a pessimistic view about our occasional inability to diagnose closed or latent empyemas of the accessory sinuses. It is true that many latent sinus empyemas go on for a long time unrecognized, but that does not make sinus disease "a mystery event to the best of rhinologists." "If we can divorce the accessory sinus from our list we might well say that we have kept pace with other branches of medi-

* The paper by Dr. Maurer here referred to appeared in the April number of THE JOURNAL.

cine," says the essayist, but it seems to me that if we do divorce the accessory sinuses from rhinological practice very little is left of which we can especially be proud. It is diagnosis and treatment of accessory sinus disease that gave rhinology a right to be a special branch of medicine and surgery.

A dozen or more of unrecognized accessory sinus cases cannot overshadow the hundreds of cases which are daily recognized and successfully treated. "Are we deserving of the confidence that is placed in our ability by the laity or brother physicians? What is our opinion really worth?" asks the essayist. To this I must answer, we are deserving of the confidence that is placed in our ability as long as we are honest with ourselves and our patients. If we feel that we are not sure, if there is or is not accessory sinus involvement in the patient under examination, if we have exhausted all modern means of diagnosis and we are still in doubt, we must not resort to exploratory surgery, but be frank with our patients and tell them what we do not know. It is a personal equation. We must ask ourselves what would we do if this patient was a member of our family. So thinking and acting accordingly I am sure that none of us will do wrong wilfully.

The doctor is right in a good many things he has said. We are far from being perfect in our means of diagnosis, but so are the general surgeons as well as the internists, the neurologists, etc. I must pass over the doctor's descriptions of our means of diagnosis with the exception of the Roentgen ray. A Roentgen-ray picture in order to be of value must be stereoscopic; where we get the almost natural picture with the depth of the sinus. The radiographer must be an expert interpreter, and he can only become such when he is allowed to be present at the operation on the patient whose radiograph he has taken and interpreted. In the operating room the radiographer learns his mistakes as well as we do ours.

I see no harm in a probe puncture of the maxillary sinus for diagnostic purposes. It is easy to perform and without danger if the size of the cavity is known from a radiograph, but I cannot admit of the right of a surgeon to explore the frontal sinus and ethmoid cells for purely diagnostic purposes. The opening of the frontal sinus endonasally is not always a safe procedure. Nor do I want to do a Killian or a radical frontal sinus operation without being pretty sure of my ground beforehand. I do not care for the sarcasm of general surgeons about our work in rhinology. The nasal douche, the eustachian catheter, the tonsillectomy and the submucous resection all have their place; and to perform a submucous resection well, a man must certainly be as skilful as the one who opens the abdomen for the removal of the appendix. The essayist says, "Is there any won-

der that rhinology and laryngology have not occupied in general the dignified position in the medical field that this important subject deserves?" This has been true fifty years ago before Zuckerkandl published his memorable work on the anatomy of the nose and accessory sinus; before Hajek published his epoch making work on the suppurative diseases of the accessory sinuses of the nose; before Onodi has given to the world his research in the field of rhinology; before Felix Simon, Sir St. Clair Thompson, Morritz Smith, Bernard Frankel, Meyer, Halle and numerous English, French, German and American rhinologists have enriched this field with their labors. Rhinology and laryngology today occupy and rightly so a high place among other specialties in medicine.

Our shortcomings are not any more apparent than those in other branches of medicine. We are constantly striving towards the goal "diagnosis in every case," but as long as we are human and as long as we deal with a human organism and not with an inanimate motor we are bound to make mistakes. It is these very mistakes that spur us on to study, investigate, learn, gather knowledge wherever we can find it, woe to medicine when we will think that we know it all.

DR. W. A. HOLLIS, Hartford City: We have not absolutely reliable and infallible methods of examination and diagnosis of sinus diseases and I venture the statement that we never shall have. Yet, on the other hand, we have a decided advantage over some of our brothers in other departments of surgery. Aside from the posterior ethmoidal and the sphenoidal sinuses, they are easily explored with no possibility of harm to the patient, if we will only take the time. If we rely too much on subjective symptoms we are going to be at sea, because the temperamental tendencies of the patient may mislead us. The gynecologist may hear the same complaints.

Yankhauer has called attention to a very important point as a diagnostic aid where there are headaches of a suspected sinus origin. Inhalations of steam will shrink the mucosa and enlarge the sinus passage; this and the stimulated ciliary motion will afford better drainage. It is, therefore, found that if a patient suffering from recurrent headaches obtains either partial or temporary relief from inhalations of steam, it can be definitely relied on that the cause of the headache is either in the nose or one of the nasal accessory sinuses.

I am of the opinion that we do not use the long Killian speculum enough. It is so much easier to explore the middle and superior fossa with it. We depend too much on a quick look in and that too without taking the time to deplete the nasal mucosa.

The essayist has been very fortunate in his

experience with referred cases. Men of unquestionable ability will sometimes not give the sufferer as much time and gray matter as we will ourselves.

It is only the very exceptional cases that need be referred anyhow, so if it is of sufficient interest and importance, go along with him. Two heads are better than one in cases of this kind. Invariably a satisfactory diagnosis is reached or you have a different consideration for your confrère; perchance a better opinion of yourself.

When we were in general practice we did not call a case typhoid fever on our first visit; maybe not for several. Keep these patients with suspicious sinus disease in the office a long time. See them and examine them frequently under different conditions and after rests in different postures. Withhold an opinion until you are sure you have one.

I certainly agree that transillumination is of very little value. I scarcely look on it as an adjunct in diagnosis. I, therefore, seldom use it. The best results with Roentgen ray so far have been with the superficial sinuses. It is quite reliable in demonstrating their size and contour, but of their contents very uncertain. I agree with the essayist and share his disappointment, yet I believe the Roentgen ray is the coming thing in diagnosis. As the technic becomes more perfected, the findings will be more reliable and easier interpreted.

Dr. Maurer speaks sarcastically of the "Noted Eastern Surgeon's opinion of us." I would speak sarcastically of this noted eastern surgeon. There is no excuse for his ignorance. Many of the general surgeons are astounded when they discover the advancement and accomplishments in rhinology of the last few years.

I like the tone of the latter part of Dr. Maurer's paper. It is practical and to the point. I am sure he is not nearly so discouraged as he might have us think. If we deliberately, carefully and conscientiously carry out the diagnostic technic as outlined by the essayist, we will not be "guessing" and our opinion will receive the consideration it deserves.

DR. LAFAYETTE PAGE, Indianapolis: The question of diagnosis is certainly the most important thing. I am called up every day or so by patients and sometimes by physicians to know if I charge anything for making an examination, which, of course, is an absurd question. Many of these patients have been told that this doctor and that doctor does not charge for making an examination. What we should do is to charge enough for our time from our work to make a special study of these cases. So many general practitioners think they can send a patient in, often an obscure case that they have been treating a long time, and expect the specialist to give an opinion off-

hand without any trouble. We should study a long period to determine what is the matter. There are so many different conditions that affect the sinuses that they certainly ought to be carefully studied. The doctor who gives an off-hand diagnosis misses it in very many instances. We should always be on the lookout for that disease which is so often manifest in the nose and that which often obscures everything else, and that is syphilis. I think syphilis must have been the origin in many of Dr. Maurer's cases he spoke of; sometimes it is tuberculosis. All such conditions should always be carefully studied. Then when we come to these pathologic conditions in the nose, about middle turbinate, sinuses, we will not find so many things to baffle us. I think we will find that most of these conditions start in childhood in tonsil and adenoid tissues. They soon result in chronic ethmoiditis with all the clinical changes that take place and which continues throughout life.

I don't think where good tonsil work is done, there is ever a mistake made in operating. In old people you will often find an old suppurating pus gathering in the tonsil which infects the nasal membranes and sinuses and you cannot cure such cases without taking out the tonsils. Always look there and you will make no mistake. The maxillary antrum becomes infected secondarily. As to the teeth, we should investigate them thoroughly. Often teeth that look perfectly harmless, in which the nerves are dead, cause infection of the maxillary antrum.

DR. JOSEPH D. HEITGER, Bedford: I cannot agree with the pessimistic attitude of Dr. Maurer. We are dealing with conditions that are progressive. A great many of these conditions have no characteristic until they reach a certain stage. If that case reaches one of us before that stage is reached we must say in those obscure cases, we have gone as far as we can and we do not know yet what is wrong. Suspect the trouble and watch patient afterward. Some of these cases are to be diagnosed only by weeks of observation and study. It took a doctor, who is pretty generally conceded to be the greatest sinus man that ever existed, three years to arrive at the proper diagnosis of a case, and during that time the case was operated seven times with no beneficial results; and it was only the last operation in which he found the source of the inflammation. He suspected something there and he had to await developments. If one man, Dr. Hajek, who is considered the best, in a very obscure case took three years to get at the source of the trouble, then why should we be pessimistic?

I recall an instance three years ago at the meeting of the American Medical Association in Minneapolis where I assisted in some operative work in which as soon as the bone was laid

bare the diagnosis was there. It was lues. No Wassermann had been made in either of those two cases. It is not guess work. It is failure to apply the knowledge that we have that we make so many mistakes.

Again, in regard to the use of the transillumination, we can take a very excellent lesson from the Roentgen-ray man; before you can properly transilluminate a patient you should sit in a dark room with the patient for at least fifteen minutes before you can differentiate the different shades of light. No Roentgen-ray man attempts to do a fluoroscopic examination until his eyes have become adapted to the dark room. You can notice a marked difference where you simply shoot your patient into the dark room and immediately transilluminate and where you wait fifteen minutes to adapt your eyes to the dark room. The transilluminator is only an aid.

DR. FRED M. RUBY, Union City: I think that these are very excellent papers to come together. I can't say which one of these papers I enjoyed the most. I certainly feel that Dr. Heitger's paper is valuable in bringing points forward that we know sometimes escape, as in nearly all questions that come up it is our own fault if we cannot follow troubles to their source. We spend much time telling our people that the doctor has to be so different from the lawyer and other professional men. A lawyer can read up on his case and come to his conclusions at leisure, but the doctor must know his case immediately. We don't. The result of such teaching is that both the people and the doctors in general practice think we ought to be able to take a flying glimpse into a man's nose and tell him all he has got and all he ever had. In my very locality I find that in some cases our general friend will send us, because we say to that case that the trouble is not perfectly clear and ask them to come back in three or four days, they go away and we don't see them any more. In some indirect way we find out that they have gone to another doctor because they thought Dr. Ruby didn't know anything about their case. The next doctor they go to sends them to a hospital for a week and diagnoses the case that we couldn't make in an hour, but they think such a doctor is wonderful. When we teach the people that we must observe these cases just the same as we must observe a case of suspected typhoid fever, then our reputation will be better among the laymen.

DR. JOSEPH MAURER, Marion: Dr. Page spoke about taking out tonsils and adenoids for the removal of these sources. After the tonsils and adenoids have been removed and we see a case years afterward, we have to consider the condition at the time the patient presents itself. There are limitations to our ability, in everyone's ability to tell conditions. I have been

associated with a man who makes no attempt to make a diagnosis hastily. I send my patients away and ask them to come back, and I again take his history as if I had never seen him before, and yet there are times when I am baffled as to the cause of the infection.

As to the value of the transilluminator, if a patient is in the dark room three years it will do no good. You can tell nothing about it when you get it. The transilluminator is nil.

Dr. Hollis spoke of the wrong of my pessimistic view, should take out the tonsils or do a submucosa. Why are those men, the teachers that teach eye, ear, nose and throat diseases, why are they not big enough to say they are not able to make a diagnosis? Why do they send our patient back to us telling us something to do, but not telling us what is the matter? When I have the opportunity to examine a case, in everyone of those cases a Wassermann is made. After studying a case two or three months, why should the specialist not be big enough to come and state what he believes and that he is not able to make a diagnosis?

DR. JOSEPH D. HEITGER, Bedford, closing: I would emphasize the use of the different aids, transilluminator, radiograph and all. If it will aid one time in one hundred that is that much. All are aids. Everything will help.

HEALTH insurance for workers may prove to be a blessing, but so far as the medical profession is concerned, it opens the way for a great deal of imposition. The legislation already proposed, provides for a rather comprehensive scheme of safeguarding the interests of the employer and the employee, but the question arises as to how much the interests of the physician are safeguarded. After all of the various officers of a well-equipped administrative bureau have been well paid, as provided by the contemplated acts, the employee receives a sick benefit equal to two-thirds of the insured's wages for twenty-six weeks, the bills for hospital attention, nursing, and other benefits are paid, the balance is for the doctor. As has been well said by one writer, "The doctor who does the work, who has done the work, who is the all-important pivot on which the entire scheme hangs, and who, because he is unorganized and is not looking out for his own individual interests, comes out at the small end of the horn every time." If health insurance is to be the great benefit that is claimed for it, some provision must be made for adequate compensation to the medical man on whom the entire burden falls. There is no reason why the doctor should be made "the goat" when the interests of everyone else are cared for in a proper manner.

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EDITORIALS

SPUTUM EXAMINATIONS IN PULMONARY TUBERCULOSIS

New methods for diagnosing, treating and controlling microbial diseases come so thick and fast that the best methods are neglected for the newest.

Just now the methods for diagnosing pulmonary tuberculosis are many. Some determine the etiology, some the pathological physiology and some the pathological anatomy. It is very certain that a man in general practice cannot perfect himself in the technicalities of bacteriology and physical diagnosis.

Men specializing in pulmonary tuberculosis lay such stress on the physical findings for diagnosis that others outside this specialty are tempted to neglect sputum examinations or to try to make a physical examination for which they have little training.

Only 50 per cent. of the patients admitted to the Indiana State Tuberculosis Sanitarium have ever had a sputum examination.

James S. Ford,¹ in a study of 1,000 cases of pulmonary tuberculosis found that these patients had consulted 1,940 physicians, of whom 1,085, or 55 per cent., made a physical examination only, and of this number 151 did not deem it necessary to have the patient strip; 13, or .7 per cent. took temperature only; 14, of .7 per cent. made a sputum examination only; 381, or 20 per cent. made a sputum and chest examination; 114, or 6 per cent., examined the chest, took the temperature but did not make a sputum examination; 3 or .2 per cent., took temperature and made sputum examinations but no physical examinations; 131, or 7 per cent., made chest examinations, took temperature and examined the sputum and 197 or 10.2 per cent., made no examinations of any kind.

Some tuberculosis specialists assert that persons with tubercle bacilli in their sputum are

not in the incipient stage. The stage of the disease depends on the pathological lesions in the lung along with the symptoms. Most men classify their cases on the basis of lesions alone, which is wrong. A person may have incipient lesions with moderate or advanced symptoms or incipient symptoms with moderate or advanced lesions. Ninety-eight percent. of all persons with pulmonary tuberculosis who expectorate have tubercle bacilli in their sputum.

If a patient is unable to see a specialist then the family physician should at least have the sputum examined since this, if positive, is of such great importance for prevention and treatment. Not to have the sputum of a pulmonary tuberculosis suspect examined is criminal negligence, and should be cause for having a charge of malpractice brought against the family physician by the patient.

"SLACKERS" IN THE MEDICAL PROFESSION

Word comes from Indianapolis that some of the doctors who have applied for appointment in the Medical Officers Reserve Corps, who have had their applications accepted and who received notification to appear before the examining board at a certain date, have failed to show up. The majority of them give no excuse whatever, a few present lame excuses, and others even withdraw their applications. It appears that after the first burst of enthusiasm a number of these would-be medical patriots have acquired "cold feet."

A noticeable feature is the fact that it is the older men in the medical profession who are very generally applying for appointment in the Medical Officers Reserve Corps. and also it is they who are most generally coming forward to make good their applications. Too much credit cannot be given to those who have offered their services to the Government and who are going forward promptly at the call, but condemnation cannot be too severe for those men who have offered their services and who, on one pretext or another, now are attempting to avoid the responsibility. The man who volunteers his services should do so with the full knowledge of what it means and the responsibilities incurred. The younger men in the medical profession are the ones most desired and most needed, as they also are the ones who, generally speaking, are most able to answer the country's call. It is regretted that there should be any

1. Report of the 11th annual meeting of the National Association for the Study and Prevention of Tuberculosis, 1916, p. 108.

demand for such sacrifices as are required, but the present crisis demands action, and prompt action, if our Government is to have the support and protection that it deserves and must have.

It is very evident that the American people do not fully appreciate the gravity of the situation and are not giving proper attention to the appeals of our Government officials who realize the seriousness of our position. Medical men will be interested in a message coming from Dr. Charles A. Powers, a former president of the American Surgical Association, now in France, when he says:

"Those of us who are here realize that it is in no way possible for our people in America to understand the importance of the present situation. We are at open war with a strong, determined, implacable foe, and it should be the first order of business for every man, woman and child in the United States to endeavor to help in crushing this monster."

We have been advised that we shall need in a few weeks 10,000 medical men, and yet up to the present time there are not 4,000 who have volunteered their services. It should be the ambition of the medical profession of this country to volunteer in such numbers that a selective draft will be unnecessary. A large number of medical men are needed at once to examine recruits, to care for them and protect them from diseases in camp in this country, and to go with those troops to France. There should be no difficulty in securing the requisite number of medical men for this service, and while there is as much patriotism and as much of a spirit of self sacrifice in the medical profession as in any other profession or vocation of life, yet there seems to have been a failure to recognize the urgency of the demand for help from the medical profession in this perilous period through which the country is passing. This is a time for action, and the country as a whole will have little patience with the man who attempts to pull off "grandstand stunts" by offering his services to the country with a great flourish, and then fails to deliver the goods. In other words, such a man, worse than the ordinary "slacker," who does not even offer his services to the country, is marked for the general condemnation of his fellow men which he so richly deserves.

We have faith in the medical profession as a whole and cannot believe that there will be any very general failure to respond to the needs of the hour, but the failure of many of the younger Indiana physicians to respond to orders after applying for membership in the Medical Officers Reserve Corps — this failure representing more than 25 per cent. of all those who have made

application — makes us feel that we are due for a sharp awakening unless this indifference to obligation is overcome. We also are due for a rude jolt through conscription unless more medical men who are able and capable of rendering service to the government come forward with their services. We all must do our part in one way or another, and as there is a great field for medical work and a demand for thousands of medical men, there must be a very general response to the call of the Government for medical recruits.

ONLY REAL DOCTORS SERVING IN THE WAR

If the general public is possessed of as much gray matter as the average donkey, the part that the regular medical profession is playing in the war game should be very instructive and teach a lesson that will sink deep in the minds of those who have a high regard for consistency. When the United States got into the war there went forth a call for thousands of medical officers. Did Uncle Sam ask for osteopaths, chiropractors, or Christian Scientists? Well hardly! Have the osteopaths, chiropractors, Christian Scientists, and the horde of other medical pretenders offered their services in any capacity? Well hardly! We will bet a dollar to a punched nickel that every "mother's son" of them has taken to the tall grass and are not even offering their services in the officers' reserve corps, and probably they will avoid conscription if they can. And what about the work that is being done by the American Red Cross Association and the Young Men's Christian Association? Do the Christian Scientists contribute to these great humanitarian agencies? No, not a penny of which we have any knowledge! And then the Christian Scientists, representing the most monumental fraud of the ages, claiming that disease and suffering is a figment of the imagination, are as silent and inactive as the tomb in these times when there is an urgent demand for heroic service, for Christian sympathy instead of studied indifference. Surely a war like the one now going on brings character to the front; it is a time when bravery and loyalty become evident, and when competency and training show for their full worth. The regular medical profession volunteers its service in the interest of the country, but the country expects it because the regular medical profession represents the only class of men to whom it can

turn in war times for intelligent and efficient service in caring for the sick and wounded among the nation's soldiers and sailors. The government does not even ask for the services of any other cult, and for the very good reason that it knows it will not secure services worthy of the name. The regular medical profession is doing a heroic and epoch-making work on the battlefields of France. There you will find many American physicians, and within a few months the depleted ranks will be augmented by several thousand new recruits from the American medical profession. That they will do credit to themselves, to their country, and to their profession is beyond question of doubt, but the American public should take note of the fact that on the battlefields of France, where there is sickness, where there are injuries of every conceivable kind, and where there are medical and surgical problems the like of which never have been met before, conditions demand and are receiving the attention of educated and highly trained physicians, and there isn't an osteopath, chiropractor, Christian Scientist, or any other of the horde of ignorant imposters or medical pretenders who are offering their services in that work, nor whose services would be accepted if they were offered. Will the American public profit by the lesson that is brought so forcibly to attention?

IMMEDIATE DUTIES OF MEDICAL RESERVE OFFICERS

Regularly commissioned Medical Reserve Officers, as well as those who are applying, or who are thinking of applying, for such commission are inquiring as to when they will be put on active duty and what that duty will be. Many letters are received in which the writers express the desire to be ready when the call comes, but do not want to make definite arrangements regarding their practice until they know how soon they may have to respond to the call of duty. It is impossible even for government officials to give the information positively as regards any particular individual. The following is a general statement that may be a basis from which each one may draw his own conclusions: It is probable that many Reserve Corps Officers — those of rather mature age — will be put on active duty to examine recruits. When the examination of these 500,000 recruits actually begins, it will put to the test the "preparedness" of the medical profession. To make

a physical examination of 500,000, to give the series of prophylactic injections for typhoid fever and, in the majority of recruits, vaccinate against smallpox, will be an extensive and a serious undertaking. But it probably will be found that nearer 700,000 will have to be examined before the 500,000 "fit" men are secured. Hence we repeat again, the big, immediate work before those of our profession who have volunteered is that of examining recruits. Another point to be considered is this: As they pass their physical examination the recruits will be mobilized in camps to be located in various parts of the country. Some eighteen camps, it is stated, are being selected. To supply these camps will require 3,500 medical officers — that is, seven medical officers for each 1,000 men. These officers, since they have been drawn from civilian life, will have to meet conditions and problems and perform duties entirely different from those to which they have been accustomed — so different that special training and special instruction are positively necessary. Hence these 3,500 men must go through a course of training. Preliminary details for this training, we understand, are now being worked out. There will be three training camps for medical officers, Fort Oglethorpe, Fort Benjamin Harrison, and Fort Riley, each to accommodate 600 men. In addition, smaller groups of medical men will be assigned to, and take their training where reserve officers of the line are taking their special training. As a matter of fact, already quite a number of medical men have been assigned to training camps. Of course, the Reserve Officers when trained will be transferred, part to the mobilization camps, and part to assist in the examination of recruits. The men assigned to these camps for training will probably be the younger men — those under 45. — *Journal American Medical Association*, May 26, 1917.

INEQUITABLE COMPENSATION ACTS

In framing compensation acts, the medical profession — with its usual short-sightedness — has failed to take into consideration the fact that the acceptance of the small medical fees provided for by compensation acts is in reality contributing to the coffers of insurance companies and indirectly to the industries which are supposed to bear the burden. As has been well pointed out in an editorial in *The Journal of the Iowa State Medical Society*, "The state, in the interest of the injured employee, has

undertaken to provide him with skillful medical care at the expense of the industry, which finally falls back on the general public. If, therefore, the state administered the insurance instead of private corporations, the medical profession no doubt would be willing to contribute its share towards welfare measures, but there naturally follows an unwillingness to contribute to the profits of a corporation which undertakes to administer the insurance, or, in other words, it objects to the insurance corporation enjoying certain profits growing out of the work of the doctors."

The greatest difficulty encountered in securing fair and equitable health and compensation legislation is the antagonism offered by insurance companies which seek to profit unduly through legislation for the common good. It goes without saying that the insurance companies, with a powerful influence wielded, are to be reckoned with in any scheme of health insurance or accident indemnity for the industrial classes, and these companies will not only see to it that they profit through any legislation in which they are interested, but they will take good care to secure provisions whereby their profits are enhanced with little or no regard for the interests of others. The physician, noted for his neglect to protect his own interests, will suffer most of all if he depends on insurance companies to fix the compensation for medical and surgical services.

THE TRAVESTIES OF EDUCATION

The so-called "American University" is an excellent example of the travesties of education which are the direct result of the inexcusable custom in most of our states of granting charters to "educational" or degree-granting institutions without first making inquiry regarding their ability or facilities for furnishing an education. Do the words "school," "academy," "college" and "university" really stand for educational institutions, or don't they? So far as can be learned, the American University owns no college building, no laboratories, no dispensaries and no hospitals; nevertheless, it brazenly professes to prepare "doctors" to treat all classes of human ailments. Its only habitation thus far discovered is a small suite of rooms on the third floor of an old office building in Chicago. This building bears no sign to indicate that it is a university, and in the directory in the entrance to the building only a close search reveals on

the wall the sign which indicates that the building houses so important a tenant! When the investigator wends his way to the third floor he discovers a door on the glass of which he reads:

"American University, 310-312. American College of Mechano-Therapy. F. S. Tinthoff, S. J. Tinthoff, W. L. LeBoy, M. D., E. Juhl, M. D."

Possibly the American College of Mechano-Therapy is another "department" of the "American University." At any rate, from reports it is quite evident that it is "a bird of the same feather."

Our present concern with the American University is in regard to its "Department of Chiropractic," which issues a pretentious announcement of sixty-four pages. This announcement sets forth such courses of instruction as it professes to give; contains many testimonials regarding the princely incomes being earned by chiropractors; shows a facsimile of its "beautiful diploma, handsomely lithographed," which is further described as having a "prepossessing appearance which will add to the professional dignity of any office;" and contains numerous other catch phrases intended to attract the dollars from the credulous and unwary.

What use, indeed, would this institution have of buildings, laboratories or equipment since it makes no pretense of giving a resident course? In fact, its announcement does not mention such a course, but lauds its "extension" or home study course, by which chiropractic can be "more easily acquired than the other forms of healing."

Much stress is laid on the ease with which this home study course may be obtained. In fact, no preliminary education seems essential. Says the announcement: "You do not need a collegiate education to render you fit to study chiropractic. A common school education is all that is required." Even a common school education would not appear to be necessary for the course offered, and it would be a safe guess that no student was ever rejected for the lack of it. Says the catalog: "It does not require the years of education needed in other lines;" but some "students complete the work in four months." Even then a student need not spend all his time in study, but can "pursue his ordinary occupation while studying the course."

The greatest activity of this "university" is in its mailing department, and it is evidently doing a land office business—thanks to the leniency of the postoffice department in allowing it to use the mails. Within three months' time one of its "prospects" received five voluminous communi-

cations, containing altogether forty enclosures including announcements, testimonials, booklets, vari-colored leaflets, etc. Extensive use is made of the system of "follow-up" letters containing the usual catchy subterfuges for separating dollars from the unwary, such as offers of courses costing \$100 marked down to \$68.75; allowing fees to be paid in instalments of \$25, marked down to \$12.75, or of \$15, marked down to \$8; offers of commissions for new students, and certificates offering free the first five lessons, if enrolment is sent in by a certain date.

Its announcements abound with statements calling the attention of the reader to the possibilities of "financial success" if he but invests his money with this school; of "the rewards that are awaiting" his command; the possibilities of "successful results" and of "reaping a rich harvest;" the "opportunities for any chiropractor to earn from \$1,200 to \$12,000 per year;" that "chiropractic may be practiced with profit and success;" that it is "a most pleasant and profitable profession," etc., etc. The affair is distinctly a business proposition with a maximum pull for students with the fees they pay and a minimum of education in even the barest essentials of the knowledge required to intelligently diagnose or treat human ailments.

There are also the usual lot of comments running down physicians and the practice of medicine; reference to "noxious and poisonous drugs;" statements that "physicians are abandoning the old form for chiropractic," etc., etc.

What, indeed, is the use of spending ten or eleven long years in high school, college, medical laboratories, dispensaries and hospitals, with the expense of thousands of dollars, which such a course entails, when in four months of home study, while one is pursuing his regular occupation, and for only "\$100, marked down to \$68.75," he can secure from this institution a "beautiful diploma, handsomely lithographed," which (he is led to believe) will make him eligible to treat all classes of human ailments and to "reap a rich harvest" by exacting large fees from his credulous patients.

When with five or six years of resident, all-day medical training required of physicians one compares the four or more months' correspondence course required by the "American University Department of Chiropractic," it is possible to realize how serious a menace this and other like institutions are to the welfare of the public.—*The Monthly Bulletin of the Federation of State Medical Boards of the United States.*

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

IN Ohio it is illegal for Christian Science healers to accept compensation for their work. Just how long before the Christian Scientists succeed in having the law changed depends entirely on the ability of the Ohio medical profession to prevent changes in the present Ohio Medical Practice Acts.

THE Medical Department of Indiana University is to have a new college building. Much praise should be accorded Governor Goodrich for making it possible. We are told that a building to cost not less than \$300,000 will be erected, and that it will be in keeping with the needs of the institution and a credit to the state.

THE Indiana doctors who are going to war are getting cold comfort from the fact that the British and French war statistics show that in the present war the percentage of loss is greatest in the medical department, and that the infantry, artillery, and air craft departments follow in the order named. This should set at rest the comment of some members of the laity who are prone to believe that the medical officers run little risk.

COMPULSORY health insurance should be opposed by the medical profession. The plan has little in its favor, and if carried into effect it will commercialize the medical profession—and on a low plane at that. The sooner that medical men realize that compulsory health insurance is a pure business proposition, and that it should be treated as such, the better it will be for the profession at large. The medical man is considered only so far as he is needed to effect an economic saving.

UNCLE SAM is now printing and distributing a daily newspaper known as *The Official Bulletin*, published under the order of the President by the Committee on Public Information with George Creel as Chairman. The subscription rates by mail are \$5.00 for one year, \$3.00 for six months. *The Bulletin* contains all official information concerning the war, and covers the various proclamations, army and navy orders, assignments, and such war news as is proper for public dissemination.

THERE is an immediate need for nearly 2,000 young medical men in the Medical Corps of the U. S. Army as permanent medical officers. The life and professional work of the regular army medical officer has many attractions. It nowadays offers opportunities for the scientifically inclined that it did not offer until recent years. The position is one of honor, one that commands respect, and one that presents many opportunities for the ambitious. The age limit until Jan., 1918, is 34 years; after that, 32 years. The needs are urgent, and those who are considering making application for membership in the Medical Corps should do so at once.

It has been prophesied that a United States Army of 2,000,000 men will be necessary before the close of the present war. The first draft will be for 500,000 men, and that is expected any day; then this is to be followed by succeeding drafts of 500,000 men each. With an army of 2,000,000 men the medical department of the army will call for 20,000 medical officers, which means that about one in every seven physicians must volunteer or be drafted in service. While the younger men are most capable of serving, yet in all probability men under 55 or even 60 will be accepted. The duty of the medical profession is to supply this large number of medical recruits without resort to conscription.

IN war times the Government needs a large number of medical men, and at the present time the Government should know on whom it can depend for its medical officers. Accordingly, it is the duty of every able-bodied doctor to offer his services. Not every doctor whose services are offered will be required for immediate service, nor is there any reason to suppose that every doctor offering his services will be sent to the war hospitals; but the Government must have a knowledge as to the resources that can be depended on. If there are not enough volunteers, then the selective draft will be introduced. That means that every doctor under 45 or 50 years of age will be subject to duty.

GERMANY unofficially has announced that she proposes to sink hospital ships in the war zone. Such an announcement is superfluous in view of innumerable incidents which show that the German war chiefs have no respect for any of the rights of nations or humanity. A definite policy of ruthless warfare is followed, and the most uncivilized barbarians have not been guilty of worse offences than can be charged to the German soldiers and sailors who presumably are acting under specific orders from their superiors. Even a German soldier, possessing a few of the finer instincts, in writing to his relatives, says that the German soldiers at the front are no longer acting like human beings, but are even worse than savages and beasts of prey.

IN an editorial in the May 5 number of *The Journal of the American Medical Association*, J. Ogden Armour of Armour & Co. calls attention to the responsibility resting on physicians in connection with the unprecedented food shortage which confronts the United States. He emphasizes the fact that the conservation of the food supply is just as important and just as necessary as is increased production, and reminds physicians that they should take the lead in teaching the people how to conserve the food supply. This is another avenue of service that the medical profession, and especially the men who are compelled to stay at home because of physical unfitness or family responsibilities, can render the country at this critical time.

EVERY once in a while a quack doctor will write a letter of scientific inquiry to a number of prominent and reputable medical men with the distinct object in view of getting a courteous answer which may be used in an advertising way to indicate that the quack is on good terms with some of the best men in the medical profession. It is a good plan to look up the pedigree and standing of any doctor who writes for information of any sort. The A. M. A. Directory gives a very comprehensive record of practically every man who is licensed to practice medicine. An inquiry coming from a doctor who is not a member of one or more reputable medical societies deserves to be thrown in the wastebasket, or, at best, answered with unusual caution.

DUE to the increasing number of "dry" states, the "jag cures" should be in great demand. Many an "old soak" in Indiana, knowing that it will be very difficult for him to secure booze

in his home state after April 1, 1918, may consider it advisable to take the "jag cure" and straighten up before the state becomes dry. These unfortunates may ask the advice of physicians, and in every instance the ethical and reputable sanitariums and hospitals for the treatment of alcohol and drug addictions should be recommended. There are any number of quack institutions that advertise extravagantly and solicit "business" through circulars and personal letters, but seldom do these institutions do anything more than swindle those who go to them for help, as they also impose on any confidence that may be placed in them by the medical profession.

THE epidemic of septic sore throat occurring recently at Galesville, Wisconsin, and definitely traced to the milk supply, adds one more link to the chain of evidence pointing to the necessity of efficient pasteurization of all milk. As stated by Rosenow and von Hess, who investigated the Galesville epidemic, virulent bacteria may be present in the udder of cows with no demonstrable sign of disease. They also point out that it is practically impossible to handle milk without risk of contamination from human or other sources, even through the rigid technic of an operating room be employed. Since milk is such an excellent culture medium, inspection of dairies, certification and grading of milk according to sediment tests and bacterial counts as now practiced, while valuable, cannot permanently safeguard the public health. Therefore, efficient pasteurization should be universally adopted.

THE thirty-day clause, which presumably governs indemnity insurance companies in paying for medical and surgical services rendered employees who are indemnified under the Compensation Act, is a rank injustice to all concerned, even the insurance companies themselves. However, the doctor, always an "easy mark" for everyone, is the one who suffers most. In our judgment the members of the medical profession should unite on a firm policy of protection from the impositions practiced by sordid and exacting insurance companies. The only reason that doctors are imposed on by insurance companies is because doctors stand for it, and the sooner that doctors unite to protect themselves the better it will be for the doctors and for the injured employees who also suffer as a result of the policy of most indemnity com-

panies to secure the cheapest medical service, and everyone knows that the cheapest medical service is not often the best.

The Journal of the American Medical Association for May 26 has a note to the effect that a recent letter from the office of the Surgeon-General of the Army says that a large number of medical men are offering their services "in case of emergency" and for "their specialty only." It should be made plain that the emergency has already arrived and that the department is in urgent need of every qualified medical officer it can obtain, and that men who accept commissions in the Medical Reserve Corps must be ready for active duty of such character as the exigencies of the service may demand; that there will be for all of them a great deal to learn in addition to professional knowledge which they now have, whether they are specialists or general practitioners. It should be quite as easy for the specialist to learn his other duties as a medical officer as it will be for the large number of men throughout the country who are accepting line commission without any knowledge at all of the military service.

FOR years "Wheeler's Tissue Phosphates" has been advertised as a nerve food and nutritive tonic. Recently the preparation has been under investigation by the chemical laboratory of the American Medical Association, and after giving the report covering the laboratory examination, the *Journal of the A. M. A.* closes with the following editorial note:

"The investigation verifies facts that must be obvious to every physician who has given the matter thought. 'Wheeler's Tissue Phosphates' is an unscientific, shotgun mixture, whose most active and powerful drug is the alcohol it contains. That it was not years ago relegated to the realms of obsolete and discarded preparations is a commentary alike on the lack of scientific discrimination and the persuasive power of advertising. While in the past 'Wheeler's Tissue Phosphates' has been advertised extensively in medical journals, it seems that now the chief, if not the only beneficiary of the advertising appropriation for this product is the *New York Medical Journal*, which weekly heralds the 'Delicious' and 'Sustaining' qualities of 'The Ideal Tonic for Fastidious Convalescents.'"

NUMEROUS Indiana newspapers come to THE JOURNAL office and very frequently our attention is called to what seems to be a flagrant breach of professional ethics in the form of

newspaper puffs for certain doctors. The frequent appearance of a doctor's name in the newspaper columns of daily or weekly papers in connection with cases is quite sufficient evidence to prove to the average reader that the doctor who is receiving the publicity is responsible for it, and courts it if he does not actually ask for it. No wonder the newspapers are complaining because doctors, who scorn to spend a dollar in publishing a professional card in the lay press, will not only permit but solicit free advertising through the medium of news notes concerning cases. If doctors who exploit themselves in that manner could only realize how they cheapen themselves in the minds of the better class of people, and how thoroughly they disgrace themselves in the eyes of the better class of their confrères, they would cease the practice. As we often have stated in the columns of *THE JOURNAL*, there isn't a newspaper editor or reporter that will not respect the wishes of a doctor when a request is made to omit a doctor's name in connection with any published report of sickness, injury, or operation. Occasionally a doctor's name may appear in the lay press without his knowledge or consent, but when such things occur frequently and with striking regularity it is a safe bet that the doctor is responsible for it and is attempting to exploit himself.

OUR Indiana officials seem to be altogether too favorable to pardons and paroles. Our governors have been known to pardon some of the worst criminals, some of whom have been sent up for life, only to find out later that those same criminals are guilty of repeating the offenses for which they were once convicted. Likewise, insane persons have been paroled, or discharged as cured, and then later the same persons have shown as much lack of mental balance as they ever exhibited, and oftentimes the mental imbalance has been responsible for crimes and even tragedies. Our criminals and mentally unbalanced persons deserve humane care, but no amount of sentiment and no amount of pressure on the part of friends or politicians should result in turning loose such dangerous and irresponsible people. It may not be true to say "once a criminal, always a criminal," but at the same time the law fixes a just punishment for certain crimes, and there is every reason why the punishment meted out should, in practically all cases, be permitted to stand and not abrogated by a governor who, for sentimental or political reasons, sees fit to exercise a pardon power altogether too frequently abused. In the

matter of the insane, and especially the criminal insane, there is all the more reason for discretion in setting aside a verdict that has been rendered. It is well known that the so-called "harmless" lunatic sometimes suddenly, and without the slightest warning, turns into a criminal lunatic.

FEW doctors are flush with money, and yet no doctor is so poor that he cannot afford to buy at least one Liberty Loan Bond of the value of \$50. There are two kinds of Liberty Loan Bonds. Bearer Bonds are to be issued in denominations of \$50, \$100, \$500, and \$1,000. These Bearer Bonds, which are made payable to bearer, have interest coupons attached which are detached by the holder when the interest instalments they represent are due, and can be cashed at any bank the same as a United States Treasury note. Registered Bonds are to be issued, which are registered as to both principal and interest, in denominations of \$100, \$500, \$1,000, \$5,000, \$10,000, \$50,000, and \$100,000; checks for the amount of interest due will be mailed out semiannually to the holders of these Registered Bonds. The bonds are to bear the date of June 15, 1917, and are to run for thirty years, except that the Government reserves the right to pay them fifteen years after date. The interest is $3\frac{1}{2}$ per cent. per annum, payable semiannually, and the bonds are nontaxable, thus making them equivalent to investments bearing 6 to $6\frac{1}{2}$ per cent. interest. These Liberty Loan Bonds are secured by the faith and honor of the United States, backed by all the resources of the American people. Every doctor who subscribes to the justice of the course of the United States in entering and conducting the war we are now engaged in should subscribe to the Liberty Loan Bond issue to the extent of his financial ability.

FOOD, BEVERAGES AND MILK PRODUCTS IN THE DIETARY.—The supply of sanitary food and milk products is a problem which is given scant attention in the usual medical training, and is a subject on which the general practitioner is usually not well informed. He should be. "How to keep well," and the right use of foods for this purpose; the foods necessary to rebuild depleted conditions; those required for postoperative treatment, for nursing mothers, and for babies, are vital questions for every practicing physician.

Physicians should also be informed as to methods and foods which will help to solve

the problem of "the high cost of living." For example, it is known that oleomargarine is cheaper than butter; but is it generally known that oleomargarine and butter are essentially of equal digestibility? That some of the best oleomargarine contains 89 per cent. of fat and 9 per cent. of water, while butter has less fat—85 per cent.; and more water—11 per cent? Oleomargarine is made in large quantities, under sanitary conditions and government inspection, from selected oleo oils and butter fats. It is colored with butter color, or, if sold uncolored, is 10 cents less per pound. Oleomargarine remains firm at a higher temperature than butter, which is an item in its favor in warm climates and where ice is expensive. All these considerations should induce physicians to study the merits of oleomargarine as a food product.

Physicians should also be familiar with the relative food values of wheat, corn, oats, barley and other breakfast foods; with rice, macaroni, and even bread. It is known that protein is the essential constituent of all meats, eggs, fish and milk; that protein is found in vegetable foods. It is known also that the carbohydrates, sugars and starches are found in the great staple products, such as potatoes, beans, corn, etc. But what are the proportions? Which foods are best adapted to particular conditions? Does the baby need protein or carbohydrates? What is known about the merits and uses of baking powders, gelatine, grape juice, malted foods, malted milks, condensed milks and the dozens of other well known products that are advertised for the dietary? It is with a view of bringing the subject of food and milk products to the attention of readers that this article is published. Particular attention is called to such products as are advertised in this issue. Many of these announcements give specific information as to the nature of the products; tell how they are manufactured; give the protein and carbohydrate content; suggest conditions in which they are indicated, etc. They contain much valuable information for physicians.

Up to three years ago we were led to believe that the world was getting better and that we were getting farther away from the ignorance and barbarity that prevailed in earlier days. We were even led to believe that the day of universal peace was not far off, and the building of the Peace Temple at The Hague, and a conference in that Temple attended by representatives from practically all the civilized nations of the earth, seemed to be an indication of a

healthy desire on the part of the peoples of the earth for a closer union and the formulation of plans that would forever do away with war and its ravages. But now all that is changed, and we find almost the whole world engaged in a conflict that has been started without reason or right, and continued for the sole purpose of satisfying the greed and ambition of one ruler and those directly connected with him as a ruling party. The methods that have been adopted and the practices that have been put in force in an attempt to secure victory would put us on a par with the deeds of the most uncivilized and barbaric races of the past. Neither life nor property under any circumstances have been safe from destruction, and the laws and usages of civilized warfare have been broken without a semblance of a reasonable excuse. Accidental and chance destruction is a part of all war, but in the present war there is abundance of evidence to show that death and destruction as a part of German conquest, as has been pointed out by one of our American representatives, represents organized, deliberate, wilful, pointless, senseless destruction, brutal and unpardonable. The deliberate firing on Red Cross ambulances, and the deliberate sinking of hospital ships is an inhuman act and inexcusable from any standpoint. The murder of military surgeons only adds to the long list of unpardonable crimes. The ruin of Belgium, unprovoked and unwarranted, was quite sufficient to provoke criticism from all over the world, but making the innocent and defenseless Belgium people slaves is an act that arouses the indignation of everyone and cries aloud for punishment. The United States has been forced into this most inhuman of all wars, and as the American people ever have shown themselves the staunch supporters of freedom and justice, and the upholder of all the tenets of Christianity, they can expect to remain in this war until the evils about which we complain are corrected and the guilty punished. It is very evident that the American people believe with President Wilson that the German people as a class are not responsible for the ruthless war now being waged by the German army, but that the German government, represented by the Kaiser and his war lords, is wholly responsible, and it is our earnest wish that the United States and her allies will not give up the struggle until the Kaiser and his immediate supporters have been dethroned and the German people have established a Republic.

DEATHS

NATHAN G. HAROLD, M.D., Carmel, died May 7, aged 71 years.

ISAAC N. WELLS, Demotte, aged 77 years, died May 3, from paralysis.

SAMUEL F. B. CHAMBERS, M.D., formerly of English, died April 14, at North Hampton, aged 82 years.

CHARLES C. HAUGH, M.D., Delphi, died May 30. He graduated from the Indiana University School of Medicine, 1905.

WILLIAM VICTOR HOWLAND, M.D., Howard Park, Jeffersonville, died May 18, aged 70 years. He was a veteran of the Civil War.

JOSEPH C. WATSON, M.D., Gary, died May 1 at the Rockford Sanitarium, Rockford, Ill., from paralysis and cancer of the throat. He graduated from Indianapolis University of Medicine in 1888. Dr. Watson was 59 years of age.

BENJAMIN F. SNYDER, M.D., aged 66 years, died May 13 at his home in Camden of heart trouble. Dr. Snyder graduated from the Indiana Medical College in 1879. He was a charter member of the Carroll County Medical Society, and a member of the Indiana State Medical Association.

DAVID JOSEPH CUMMINGS, M.D., aged 71 years, died May 21, at his home at Medora, following stroke of paralysis. Dr. Cummings attended Miami Medical College of Cincinnati, and was a member of the Jackson County Medical Society and the Indiana State Medical Association.

CHARLES K. BRUNER, M.D., Greenfield, died suddenly, May 6, from heart trouble. Dr. Bruner was a graduate of Rush Medical College (1886), a member of the Hancock County Medical Society, the Indiana State Medical Association and the Mississippi Valley Medical Society. He held the positions of chief surgeon of the eastern division of the Terre Haute, Indianapolis and Eastern Traction Company and local surgeon of the Pennsylvania road. He was 60 years of age.

A. BYRON DARBY, M.D., Waterloo, died April 27, aged 76 years. Dr. Darby graduated from the Eclectic Medical College of Cincinnati, in 1863, began the practice of medicine at Flint, later removing to Waterloo, where he continued to reside until his death. He was a member of the DeKalb County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE new Jay County Hospital at Portland will soon be ready for use.

DR. F. P. BITTER, formerly located at Greensburg, has removed to Indianapolis.

DR. L. E. SOMERS, formerly of Indianapolis, has located at Lynn for the practice of medicine.

DR. JOHN R. ABNER, Hamlet, was married May 8 to Mrs. Amelia Doyle of the same place.

DR. JOHN LOOMIS, Jeffersonville, celebrated his ninety-seventh birthday anniversary May 18.

DR. B. F. BEELER, Clinton, was married on May 16 to Miss Mary Hays, also of Clinton.

DR. E. G. RICKNER, formerly of Cincinnati, has located in Monon for the practice of medicine.

DR. J. H. NILES, Seymour, has been spending several weeks in Chicago taking postgraduate work.

DR. T. C. LOUKS, formerly of Fillmore, has located at Terre Haute for the practice of medicine.

DR. C. P. HINCHMAN, formerly of Indianapolis, has located at Geneva for the practice of medicine.

CLAY COUNTY physicians have adopted a new rate card, which includes an advance in most of the fees.

A JOINT meeting of the Grant and Wabash County Medical Societies was held at Lafontaine, May 25.

THE thirteenth annual meeting of the Fourth District Medical Society was held at Greensburg on May 22 _____

DR. L. OVERSHINER, Summittville, has been appointed intern at the Robert W. Long Hospital, Indianapolis _____

DR. F. A. PRIEST, Marion, has received commission as major in the Medical Corps of the Indiana National Guard. _____

AN unusual victim of spinal meningitis was C. Alexander Fairbanks, aged 73 years, who died May 30, at Baltimore. _____

THE commencement exercises of the City Hospital, Indianapolis, were held May 11, fifteen nurses being graduated. _____

DR. AND MRS. HANSON GIFFORD and family have returned to Tipton after spending the winter at San Antonio, Texas. _____

DR. MAURICE H. KREBS, Huntington, has been granted commission as major in the medical section of the U. S. Army. _____

DR. C. H. GOOD, Huntington, was quite seriously injured on May 7, when struck by a bicycle and knocked to the pavement. _____

DR. C. B. KERN, Lafayette, was elected president of the Indiana Institute of Homeopathy at their recent annual meeting held at Terre Haute. _____

MISS MARY WHITE, superintendent of the King's Daughters' Hospital at Madison, died at St. Vincent's Hospital, Indianapolis, May 22. _____

THE twentieth meeting of the Eleventh District Medical Society was held at Logansport, May 17, with about 150 doctors in attendance. _____

AT the graduation exercises of the Deaconess Hospital Training School, Indianapolis, held May 25, nineteen young women received their diplomas. _____

DR. LORIN W. SMITH, Wabash, whose serious accident and injury was reported in the last number of THE JOURNAL, has been making a splendid recovery. _____

DR. P. UL F. MARTIN, Indianapolis, arrived in the United States, May 21, after several months spent in service in military hospitals in Bohemia and Austria. _____

DR. B. D. RAVDIN, Evansville, has resumed his practice after five months of postgraduate work at the Philadelphia Polyclinic and Wills' Eye Hospital at Philadelphia. _____

DR. J. R. MONTGOMERY, Owensville, who recently underwent an operation for appendicitis at the Hayden Hospital, Evansville, has sufficiently recovered to resume his practice. _____

GOVERNOR GOODRICH has appointed Dr. A. B. Cain of Marion to succeed Dr. John F. Spaunhurst of Indianapolis on the state board of medical registration and examination. _____

THE graduating exercises of the Hope Hospital School of Nursing, Fort Wayne, was held at the Plymouth Congregational Church on May 14. Five nurses received diplomas. _____

THE Victor Electric Corporation, Chicago, has outgrown its present quarters, and is arranging to erect a large modern four-story building adjoining the present building on the north. _____

DR. F. J. PINKERTON, Westville, first lieutenant in the Medical Officers Reserve Corps, has been assigned to the Hawaiian Islands, and left May 27 to take up his work. _____

DR. M. H. YOUNG, recently located at Harmony, has removed to Brazil and will continue the practice of medicine at that place. He also holds the position of county coroner. _____

THE twenty-third annual conference of health officers was held at the Claypool Hotel, Indianapolis, May 22. County and city health officers from all parts of the state were in attendance. _____

DR. WILL C. MOORE arrived in Indiana May 31 from Austria, where he has been serving as surgeon in a base hospital. He expects to enter service with the United States Medical Corps immediately. _____

JUDGMENT for \$3,500 has been given the widow of the late Dr. J. R. Wilson, Hebron, against the P. C. C. & St. L. R. R., for the death of Dr. Wilson, who was killed Feb. 12, 1916, on a grade crossing. _____

STUDENTS of the University and Bellevue Hospital Medical College are conducting a campaign to raise \$15,000 for the purchase of ten ambulances to be sent with American troops for foreign service. _____

THE physicians of Pulaski County have made public announcement of the fact that all fees for professional services will be advanced in proportion to the advance in price in all other lines of business and trade.

THE American Laryngological Association, in annual convention at Atlantic City, May 30, passed resolutions to offer their services to the country for examining candidates for the aviation corps and other specialized work.

THE Fulton County Medical Society held a meeting on Friday afternoon, May 4, in the interest of "Better Babies." The meeting was addressed by prominent county physicians on different phases of the baby problem.

THE National Pathological Laboratories of New York, Chicago and St. Louis have placed their laboratories, with a trained staff of technicians, at the disposal of the United States government during the war.

DR. L. F. ROBINSON, formerly of Indianapolis, but for some time assistant surgeon at Central Hospital for Insane at Raleigh, S. C., has been commissioned assistant surgeon in the navy and is now in Washington, D. C.

CORNELL University Medical College and Harvard Medical School have announced that owing to the national emergency, senior classes will be permitted to continue study during the summer months, thus hastening the graduation of the students.

A CLINIC for the diagnosis and treatment of hay-fever and rose cold has been established in the department of Dr. William Egbert Robertson, Samaritan Hospital, Philadelphia. Dr. Claude P. Brown is in charge of the dispensary work.

THE Decatur County Medical Society gave a farewell banquet on May 4 in honor of Dr. Charles R. Bird, who left May 14 for work in the London military hospitals. Dr. I. M. Sanders, president of the society, acted as toastmaster.

THE Union Hospital, Terre Haute, through its superintendent, Dr. Charles N. Combs, has offered the entire plant to the government for service, and in addition, several of the doctors of the staff and a number of nurses have volunteered their services.

DR. GEORGE F. BICKNELL and wife, Indiana Harbor, sailed from New York on June 2 for France. Dr. Bicknell has been appointed on the staff of surgeons in charge of a base military hospital, and Mrs. Bicknell, a graduate nurse, will serve in the same hospital.

MADISON County Medical Society has taken action to care for the practice of four of its members while they are in the Medical Corps of the Army, and to return these practices to them when they complete their period of service. A committee was appointed to look after the matter.

DR. CHARLES P. EMERSON represents the medical profession on the State Defense Council appointed by Governor Goodrich to cooperate with the National Council of Defense in organizing and directing the resources of the state in men and materials to make them effective for national use.

DR. H. D. WILLCUTTS is the first Howard County man to be commissioned for overseas duty. Dr. Willcuts recently has graduated from the Indiana University School of Medicine. He sought service, and has been assigned to duty "somewhere in France."

THE White County Medical Society has recently been reorganized, and the following officers elected: president, Dr. G. R. Coffin, Monticello; vice president, Dr. R. M. Reagan, Monon; secretary, Dr. H. B. Gable, Monticello; treasurer, Dr. M. T. Didlake, Monticello.

THE twenty members of the graduating class of the Methodist Hospital Nurses' Training School held their baccalaureate services at the Roberts Park M. E. Church, Indianapolis, where they listened to an address by the Rev. George M. Smith. The Rev. Smith paid a high tribute to the nursing profession.

AFTER a two months' investigation of the public health administration of South Bend, Dr. Carroll Fox, surgeon of the U. S. Public Health Service, has made public the report of his findings, and recommends the immediate appointment of a full-time health officer and the employment of five public health nurses.

DR. D. V. McCLARY, Dale, who recently attended the annual convention of the Railway Surgeons' Association, which includes the entire southern system, was elected one of the vice

presidents of the association, and also was awarded second prize for his paper on surgery. The prize consisted of a \$40 electric sterilizing outfit.

THE medical profession of Oklahoma, in a recent vigorous legislative campaign for the betterment of state laws, in particular referring to chiropractors and drugless healers, succeeded in amending the Medical Practice Act and requiring chiropractors and drugless healers to appear before the State Board of Medical Examiners for examination and license.

THE annual meeting of the Ninth District Medical Society was held at Noblesville, May 17. Dr. J. R. Eastman, Indianapolis, was one of the principal speakers. Other speakers were Drs. F. S. Crockett, Lafayette; G. D. Marshall, Kokomo; F. S. Cuthbert, Kingman; M. T. McCarthy, Frankfort; Earl Brooks, Kokomo, and T. J. Cooksey, Crawfordsville.

THE following base hospitals have been ordered to active duty in England: Base Hospital No. 4, Massachusetts General Hospital, Boston, Frederic A. Washburn, director; Base Hospital No. 15, the Mackay Unit of the Roosevelt Hospital, New York, Major Charles H. Peck, director; Base Hospital No. 17, Harper Hospital, Detroit, Major Angus McLean, director; Base Hospital No. 18, Johns Hopkins Hospital, Baltimore, J. M. T. Finney, director.

THE Eye, Ear, Nose and Throat Club of Kansas City recently has been organized for the purpose of stimulating scientific advancement among these specialists in the Middle West, as well as to engender a spirit of good fellowship between them. Surgical clinics will be held every two months, during the winter, followed by a dinner and a literary program in the evening.

ANNOUNCEMENT has been made that Prof. W. Kolle, chief of the Institute for Bacteriology and Hygiene of the University of Bern, has been called to Frankfurt as successor to Ehrlich in the Institute for Experimental Therapy and also in the G. Speyer-Haus. Prof. Hans Sachs, Ehrlich's co-worker, has been appointed director of the Institute for Experimental Therapy, and Professor Morgenroth of the Charite, Berlin, is being considered for director of the Speyer Institute.

THE American Society for Clinical Investigation, at their recent annual meeting held at Atlantic City under the presidency of Dr. Haven Emerson, health commissioner of New York, adopted the following resolution:

Resolved, That in the critical condition of the world's food supply, we consider it desirable that the manufacture of alcoholic beverages and their importation into this country be prohibited for the duration of the war and for at least one year thereafter.

IT has been recommended by the General Medical Board of the Council of National Defense that zones be created surrounding all military posts in which the sale of alcoholic liquors is to be prohibited, and from which prostitutes are to be barred. This board also has recommended that vigorous steps be taken for the prevention of venereal diseases, and that provisions be made for athletics and recreation.

NINE members of the senior class of the Indiana University School of Medicine and two young doctors who were graduated last year, left Indianapolis, May 11, for Washington, where they entered on a period of training at the school of the naval medical reserves. The training will take from four to six months. Their enlistment covers the period of four years.

NEW officers of the Kansas Medical Society are as follows: president, Dr. Charles S. Huffman, Columbus; first vice president, Dr. T. D. Blazedel, Hutchinson; second vice president, Dr. E. E. Morrison, Great Bend; third vice president, Dr. H. E. Haskins, Kingman; secretary, Dr. J. F. Hassig, Kansas City; treasurer, Dr. L. H. Munn, Topeka. The 1918 meeting of the society will be held at Kansas City.

THE Tenth District Medical Society met at Laporte, May 19, in annual session. The program consisted of the following subjects: "How Shall We Meet Our Country's Call?" Dr. Simon J. Young, Valparaiso; "War Surgery" (illustrated by stereopticon), Dr. H. M. Richter, Chicago; "Evolution of Gallbladder Surgery," Dr. H. H. Martin, Laporte; "Some Phases of Vomiting of Pregnancy and the Management of the Condition," Dr. Frederick H. Falls, Chicago. In the evening a banquet was held at Hotel Rumely, with Dr. H. H. Keller as toastmaster. Professor Williamson of Valparaiso University delivered the address of the evening.

ON June 1 medical instruction camps were opened at Fort Benjamin Harrison, Ind., and Fort Riley Kan., and scores of reserve doctors have been called to these camps. Two other medical schools will be opened later to give reserve men needed field training, and insure a steady flow of additional doctors with military experience who will be needed as the armies increase. Major Percy M. Ashburn of the Medical Corps of the Army has command of the camp at Fort Benjamin Harrison, and Major James F. Hull is assistant commander. Major William B. Bispham is in command at Fort Riley, with Major Charles R. Reynolds as his assistant.

STUDENTS from universities and colleges throughout the country, picked through the Intercollegiate Intelligence Bureau for service abroad with the United States Army Medical Corps, have been ordered to assemble at Allentown, Pa., for training before being sent to France. The organization comprises 1,500 men formed in units of thirty-six, and they have been assured of seeing service at an early date. The men will be assembled to meet the need for medical service as requested by the French mission. The total number to be enrolled will be 4,000 and all will be members of the Medical Enlisted Reserve Corps. Indiana has done her share in contributing one or more units.

THE regular meeting of the Thirteenth District Medical Society was held at Warsaw, Friday, May 11. Following was the program: "Some Practical Points in Obstetrics," Dr. H. O. Shafer, Rochester; "The Psychoneurotic as We Meet Him—Our Opportunity and Our Responsibility," Dr. H. M. Hall, New Carlisle; "A Short Study of Abdominal Symptoms," Dr. A. G. McDonald, Warsaw; "Spasmophilia," Dr. C. E. Hansel, South Bend. Dr. John H. Oliver, Indianapolis, President of the Indiana State Medical Association, was the speaker at the banquet held at the Hotel Hays at 6 p. m.

THE Mayo Foundation of the University of Minnesota has offered the government for foreign service a fully equipped field hospital unit, headed probably by Dr. William J. Mayo of Rochester, Minn. The organization is known as the University of Minnesota Field Hospital Unit and has 500 tented beds of the latest model, full surgical apparatus and a portable shelter for an operating room. Dr. E. H. Plummer and Dr. Charles Judd have enrolled in the medical staff. Dr. Frank C. Todd of Minneapolis,

the leading eye specialist of the Northwest, has given up a yearly practice of \$80,000 to help save the eyesight of wounded soldiers. Dr. H. Robertson, head of the bacteriologic department of the University of Minnesota Medical School, and Dr. S. Marx White, stomach and heart specialist, have enlisted.—*New York Medical Journal*, May 5.

THE Lilly base hospital unit has practically been recruited to full strength. The hospital has been accepted by the government and is known as Base Hospital No. 32 in charge of Dr. John H. Oliver, President of the Indiana State Medical Association. Its staff of physicians has been recruited entirely from the Indianapolis City Hospital, twenty-four doctors having enlisted. Fifty nurses, fifteen nurses on the reserve list and twenty-five nurses' aids complete the roster. The nonprofessional personnel included orderlies, hospital stewards, assistants, ambulance drivers and stretcher bearers. This hospital unit probably will be among the first to see service in France.

THE most modern hospital train to be found in this country or abroad has been presented to the state of Maryland by three railroads, the Baltimore and Ohio, the Pennsylvania and the Western Maryland. There are six cars which make up the train. Three of these are hospital cars, with forty-two hospital beds; an operating car, which it is claimed is not surpassed in the completeness of its equipment by any operating room in the city; a Pullman and dining car for the personnel of the hospital, and an express car which carries two motor ambulances. An overhead trolley by means of which a stretcher may be carried from one car to another is a special feature.

SIX base hospitals, organized by the Red Cross for service in the medical department of the United States Army, have been ordered to active duty abroad, at the request of the British Commission. The base hospitals to go were Base Hospital No. 2, organized at the Presbyterian Hospital, New York, Dr. George E. Brewer; No. 4, organized at Lakeside Hospital, Cleveland, Dr. George W. Crile; No. 5, organized at the medical school of Harvard University, Dr. Harvey Cushing; No. 10, organized at the Pennsylvania Hospital, Philadelphia, Dr. Richard H. Harte; No. 12, organized at Northwestern University, Evanston, Ill., Dr. Frederick Besley; No. 21, organized at Washington University Hospital, St. Louis, Dr. Frederick T. Murphy.

DURING May the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Non-proprietary articles: Calcium Cacodylate; Thorium Nitrate; Thorium Sodium Citrate Solution; Thorium Sodium Citrate Solution, Stronger.

Abbott Laboratories: Chlorazene Surgical Cream.

Anthony-Hammond Chemical Works: Betanaphthol Benzoate.

Armour and Company: Kephalin-Armour.

Borcherdt Malt Extract Company: Borcherdt's Malt Extract with Cascara Sagrada; Borcherdt's Malt Extract with Cod Liver Oil; Borcherdt's Malt Extract with Creosote.

Hynson, Westcott and Dunning: Thorium Solution for Pyelography, H. W. and D., 10 per cent.; Thorium Solution for Pyelography, H. W. and D., 15 per cent.; Sterile Ampoules of Mercury Salicylate, 1½ grains; Sterile Ampoules of Mercury Salicylate, 2 grains.

H. K. Mulford Company: Ampuls Calcium Cacodylate Solution-Mulford.

Synthetic Drug Co.: Diarsenol.

THE State Committee of Medical Defense was organized May 28 at Indianapolis at a meeting of prominent Indiana physicians. The former state Red Cross committee of physicians and the former state committee on medical preparedness were combined to form the new committee. The first efforts of the organization will be to seek physician applicants for the medical reserve corps in Indiana. Dr. Joseph Rilus Eastman, Indianapolis, recently returned from service with the American physicians' expedition in Austria, was elected chairman of the association, and Dr. Charles N. Combs, Secretary of the Indiana State Medical Association, was elected secretary. Other members of the state committee are: Dr. John H. Oliver, President of the Indiana State Medical Association; Dr. C. E. Barnett, Fort Wayne; Dr. E. D. Clark, Indianapolis; Dr. S. A. Clark, South Bend; Dr. W. D. Gatch, Indianapolis; Dr. W. T. Gott, Crawfordsville, secretary of the State Board of Medical Registration and Examination; Dean Charles P. Emerson of the Indiana University School of Medicine; Dr. George F. Keiper, Lafayette; Dr. C. B. McCullough, Indianapolis; Dr. George P. Pfaff, Indianapolis; Dr. Miles F. Porter, Fort Wayne; Dr. S. M. Rice, Terre Haute; Dr. Edwin Walker, Evansville; Major George M. Wells, United States Army, Indianapolis; Dr. J. N. Hurty, state health commissioner and chief surgeon at Ft. Benjamin Harrison.

GOVERNOR GOODRICH has announced the appointment of physicians throughout the state to serve as the third member of the county boards of conscription. The other members of the board are the sheriff and clerk in each of the various counties. The physicians appointed are as follows:

E. G. Coverdale, Decatur, Adams.
Hermann A. Duemling, Ft. Wayne, Allen.
George T. McCoy, Columbus, Bartholomew.
Everett Mavity, Fowler, Benton.
T. C. Dodds, Hartford City, Blackford.
G. A. Schultz, Lebanon, Boone.
W. T. Selfridge, Helmsburg, Brown.
John R. Carney, Delphi, Carroll.
Charles E. McCully, Logansport, Cass.
Ernest P. Buckley, Jeffersonville, Clark.
L. L. Williams, Brazil, Clay.
S. B. Sims, Frankfort, Clinton.
H. H. Dean, Leavenworth, Crawford.
H. H. Dwyer, Lawrenceburg, Dearborn.
I. M. Sanders, Greensburg, Decatur.
William H. Burton, Muncie, Delaware.
L. B. Johnson, Ireland, Dubois.
U. G. Souder, Auburn, Dekalb.
R. F. Banister, Washington, Daviess.
J. O. Watter, Bristol, Elkhart.
J. H. Clark, Connersville, Fayette.
Elihu T. Easley, New Albany, Floyd.
Charles Wert, Covington, Fountain.
I. O. Allen, Brookville, Franklin.
Milo King, Rochester, Fulton.
Marshall P. Hollingsworth, Princeton, Gibson.
F. A. Priest, Marion, Grant.
T. Roy Cook, Bloomfield, Greene.
Samuel Harrell, Noblesville, Hamilton.
Carl W. McGaughey, Greenfield, Hancock.
Amzie Weaver, Corydon, Harrison.
Lewis W. Armstrong, Danville, Hendricks.
C. C. Bitler, Newcastle, Henry.
F. A. Shoaf, Kokomo, Howard.
William R. Beck, Huntington, Huntington.
G. G. Graessle, Seymour, Jackson.
C. E. Johnson, Rensselaer, Jasper.
Charles E. Caylor, Pennville, Jay.
Harry S. Hatch, Madison, Jefferson.
John H. Green, North Vernon, Jennings.
J. N. Records, Franklin, Johnson.
J. G. Jones, Vincennes, Knox.
August C. McDonald, Warsaw, Kosciusko.
Andrew R. Wyatt, Lagrange, Lagrange.
James Gibbs, Crown Point, Lake.
Frank Leeds, Michigan City, Laporte.
John T. Freeland, Bedford, Lawrence.
E. M. Conrad, Anderson, Madison.
Frank W. Cregor, Indianapolis, Marion.
J. F. Michaels, Loogootee, Martin.
J. O. Ward, Peru, Miami.
S. C. Loring, Plymouth, Marshall.
R. C. Rogers, Bloomington, Monroe.
H. J. Helfrich, Crawfordsville, Montgomery.
O. A. Sweet, Martinsville, Morgan.
O. E. Slick, Kentland, Newton.
Harold O. Williams, Kendallville, Noble.
C. B. Peck, Rising Sun, Ohio.
R. L. Holaday, Paoli, Orange.
J. V. Stevens, Spencer, Owen.

Reeve C. Peare, Rockville, Parke.
 E. E. Schriefer, Cannelton, Perry.
 S. R. Clark, Petersburg, Pike.
 E. H. Powell, Valparaiso, Porter.
 S. W. Boren, Poseyville, Posey.
 E. H. Marshall, Winamac, Pulaski.
 Eugene Hawkins, Greencastle, Putnam.
 H. G. Nelson, Osgood, Ripley.
 Will S. Coleman, Rushville, Rush.
 J. P. Feagler, Mishawaka, St. Joseph.
 Charles B. Mathews, Lexington, Scott.
 William W. Tindall, Shelbyville, Shelby.
 Stephen W. Stuteville, Grandview, Spencer.
 John R. Abner, Hamlet, Starke.
 W. H. Lane, Angola, Steuben.
 Carl F. Briggs, Sullivan, Sullivan.
 J. P. Ward, Vevay, Switzerland.
 Harry L. Grishaw, Tipton, Tipton.
 C. V. Davisson, West Lafayette, Tippecanoe.
 F. T. Dubois, Liberty, Union.
 O. F. Diefenbach, Evansville, Vanderburg.
 I. M. Casebeer, Newport, Vermilion.
 L. P. Luckett, Terre Haute, Vigo.
 George S. Porter, Williamsport, Warren.
 J. W. G. Stewart, Wabash, Wabash.
 William L. Greene, Pekin, Washington.
 F. W. Krueger, Richmond, Wayne.
 E. A. Youngblood, Boonville, Warrick.
 Fred H. Metts, Bluffton, Wells.
 David Swan Linvill, Columbia City, Whitley.
 A. B. Coyner, Chalmers, White.
 B. S. Hunt, Winchester, Randolph.

The physicians in cities of 30,000 and over are:
 A. A. Ross, East Chicago; L. P. Drayer, Ft. Wayne;
 F. Joseph Toner, Gary; J. B. Berteling, South Bend;
 A. M. Hayden, Evansville.

CORRESPONDENCE

STATE COMMITTEE OF NATIONAL DEFENSE

INDIANAPOLIS, June 2, 1917.

To the Editor:—Responding to your letter of June 1, permit me to say that the new State Committee of National Defense, formed by amalgamation of the several previously existing Red Cross and Preparedness Committees, had its first meeting at Indianapolis on Tuesday evening, May 29. On Sunday, June 17, the Committee of National Defense will again meet at the University Club, Indianapolis.

The chairmen of the Councilor District Committees are expected to attend this meeting and to bring the fullest possible report of the work done in each councilor district. The chairman in each county of the state is to cooperate with the councilor district chairman in the important

matter of bringing out the largest possible registration of applicants for the Army Medical Reserve Corps.

It is earnestly desired that the chairman in each county urge each doctor under 55, in his respective county, to consider carefully and promptly whether it will be possible for him to render his country the patriotic service of joining the Reserve Corps. Each county chairman should render to the councilor or district chairman a report not less often than once every two weeks.

It is necessary to remind the doctors of Indiana again that whereas the state has distinguished itself by the prompt filling up of its quota of volunteer soldiers, the medical profession has so far been a little backward. We believe the Indiana doctor is just as patriotic as anybody else in the state, and that he will not fail to respond to the call of his country.

I am with cordial regards,

Sincerely yours,

JOSEPH RILUS EASTMAN, Chairman.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Delinquents Reinstated During May, 1917

ALLEN COUNTY

A. L. S. Kane.....Fort Wayne
 J. D. Morgan.....Dixon, Ohio
 M. I. Rosenthal.....Fort Wayne

BARTHOLOMEW COUNTY

G. E. Reynolds.....Columbus
 S. M. Voris.....Columbus

CLARK COUNTY

H. H. Reeder.....Jeffersonville

CLAY COUNTY

M. A. Freed.....Clay City
 Frederick Nussel.....Brazil

HENDRICKS COUNTY

J. D. Hendricks.....Lizton

HUNTINGTON COUNTY

W. R. Beck.....Huntington

LAPORTE COUNTY

E. D. Maddox.....LaCrosse
 D. D. Oak.....LaCrosse

MADISON COUNTY

C. L. Armington.....Anderson
 H. C. Martindale.....Pendleton

MARION COUNTY

A. J. Sheridan.....Indianapolis
 M. J. Shiel.....Indianapolis

MONROE COUNTY

Frank TournierBloomington

PARKE-VERMILION COUNTY

R. L. Dooley.....Montezuma

O. M. Keyes.....Dana

W. C. Myers.....Dana

R. E. Swope.....Rockville

RANDOLPH COUNTY

H. W. Detrick.....Union City

RIPLEY COUNTY

E. D. Freeman.....Osgood

STEUBEN COUNTY

J. L. Dunkel.....Fremont

VANDERBURG COUNTY

D. B. Cain.....Evansville

INDIANAPOLIS MEDICAL SOCIETY

April 10

Meeting was called to order by president, Dr. T. B. Noble. Minutes of previous meeting read and approved. Applications of Drs. John A. Salb and John M. Lee were read for the first time. Application of Dr. Carl B. Suth having been favorably reported by the Judicial Council, he was elected to membership by society vote.

A letter from F. E. Schortemeier, executive secretary, calling attention to the Constitutional Convention and candidates for election as delegates was read and referred to the legislative committee.

President announced following committee to devise ways and means for preventing loss of their practices to those physicians who enlist in the service of the government: Dr. H. E. Gabe, chairman; Drs. A. C. Kimberlin, M. N. Hadley, H. G. Hamer and Thomas W. DeHass.

PROGRAM

Paper: A General Résumé of Nitrous Oxid Methods in Obstetrics. Dr. A. E. Guedel.

Abstract.—Essayist paid particular attention to observations from clinical experience, which are of practical value to the general physician. Cannot foretell result as often the poor risk from the standpoint of surgical anesthesia with nitrous oxid will do well in obstetrics because of the lighter state of anesthesia required. May begin application at any time, from one to ten hours before delivery. Analgesia more feasible in usual case than anesthesia. Anesthesia better for actual delivery in about 25 per cent. of cases. Interrupted administration (induction of analgesia with the beginning of each pain) better than continuous analgesia in the usual case. When pain interval is but a minute or shorter, continuous analgesia better. Self administration suffices in all cases excepting those requiring complete and continuous anesthesia, and an average better analgesia is secured by self administration than by an anesthetist. Primiparae and nervous women sometimes expect too much and may be unappreciative and these usually controlled by removing the gas for few pains thus showing patient the difference, after which they are better patients.

Paper: Prostatic Hypertrophy (lantern slides). Drs. W. N. Wishard and H. G. Hamer.

Abstract.—This paper gives a brief consideration of the anatomy and pathology of the enlarged prostate, also the symptomatology and diagnosis of this condition. Gradually increasing frequency of urination, particularly at night, in a man past 50 years of age should always suggest the presence of hypertrophy of the prostate. Digital examination per rectum gives a general idea and outline of the prostate, also its consistence and elasticity. The catheter is of value in determining the presence or absence of residual urine, the bladder capacity, the urethral length, permeability of the urethra, the muscular tone of the bladder. Much more exact information as to the character of the obstructing growth and the changes produced in the bladder is obtained by the use of the cystoscope.

Palliative treatment includes efforts to build up the patient's general physical condition, the correction of an irritating urine, and the use of the catheter for periodical emptying of the bladder. Palliative treatment usually becomes preparatory treatment for radical removal of the obstructing growth. Early operation is advisable, as it is in the early cases where the bladder and kidneys have not become permanently damaged by back pressure and infection that the best results are obtainable. Prostatectomy is seldom an emergency operation. Where catheterization is impossible retention may be relieved by suprapubic puncture with the trocar and cannula, or by suprapubic cystotomy under local anesthesia. Either of these methods will give temporary relief and afford opportunity for improvement of the patient's condition and enucleation of the growth may be undertaken when conditions are favorable. The suprapubic operation is the one of choice at the present time. Hemorrhage, which has always been a factor in the high mortality from suprapubic prostatectomy, is controlled by the use of the inflated rubber bag of Dr. F. R. Hagner of Washington, D. C., the value of which has been greatly increased by applying the wire anchor devised by the writer and recently presented to this society. The results of suprapubic prostatectomy are good, in that restoration of bladder function is usually accomplished and the operation is attended with less danger to other structures and there is less interference with other functions. It has fewer complications and is more certain to result in a cure.

Dr. Wishard presented specimens of various types of hypertrophied prostates.

DISCUSSION

Dr. W. D. Hoskins: Convinced that rank and file of practicing physicians are not thoroughly enough impressed with the importance of the relief of pain in obstetrics. Suffering is considered a necessary evil. Has used self administered gas anesthesia for past two years. Felt safe in all stages. Mothers like it. Results satisfactory in all but one case, a primipara, in which relief was not adequate. Noted no pathological effect on mother. Gas oxygen anesthesia safe and practical from standpoint of child. No doubt prostration, jaundice and hemorrhage in child a few days old is due to chloroform poisoning in those cases in which this anesthetic is used. Therefore from

standpoint of child, chloroform unsafe and reprehensible. Gas anesthesia a very definite asset.

Dr. J. Kent Worthington: Too much emphasis cannot be placed on pre-operative preparation in prostatic cases. Large amounts of water, three quarts in twenty-four hours, a good measure. If uremia is impending phthalein test not reliable. Best to make blood urea test. Stability of phthalein test best indication of operative risk rather than a low or high result with a few tests. In cases of early carcinoma the conservative (Dr. Wishard) operation is not good. In such cases we must be prepared to remove prostate and base of bladder. Suprapubic operation may be done in two stages which reduces risk in very bad cases. Blood pressure should be studied. Death has resulted from postoperative hemorrhage due to a blood pressure of over 200. Perineal operation gives advantage of dependent drainage and no interference from intestines.

Dr. J. W. Carmack: Relief of pain in obstetrics is an important consideration. Analgesia in obstetrics is here as the result of a demand on the part of the mothers. Women do not endure pain as formerly. The hypersensitive women of today have demanded relief. Some patients have a certain amount of natural analgesia, caused by increased cerebral pressure. They are best gas patients. Analgesia better than anesthesia. To be started after second stage. Labor not shortened by nitrous oxid. Chloroform and ether analgesia unsatisfactory because they prolong labor.

Dr. P. E. McGown: In prostatic cases with some obstruction often encounter large amount of hemorrhage. Such cases are generally benign and not carcinomatous. Latter kind found more in posterior lobe and therefore have less hemorrhage. Creatinin test as standard probably more reliable than phthalein or blood urea test. Normally find 0.0015 to 0.002 gm. to 100 c.c. of blood. Uremic cases show that about 0.003 to 0.004 gm. to the 100 c.c. of blood. If we have 0.005 gm. of creatinin in 100 c.c. of blood the case is hopeless. This test gives both kidney condition and a good means of prognosis. Suprapubic method of prostatectomy the one of anatomical choice. Shock is less. Patients will be in better condition.

Dr. Bernhard Erdman: In cases of retention more harm is done by unskilled persons by introducing a catheter than in any other way. Decompression of kidneys frequently follows. Value of coagulen in postoperative hemorrhage ought not to be forgotten.

Dr. H. G. Hamer (in conclusion): Dr. Worthington apparently failed to hear my statement that prostatectomy was seldom an emergency operation. In such an event a trocar puncture or suprapubic cystotomy should be done for immediate relief followed by prostatectomy later when more favorable circumstances permit.

Meeting adjourned. Attendance 81.

April 17

Meeting was called to order by president, Dr. T. B. Noble. Minutes of previous meeting read and approved. Applications of Drs. Frank Mann and Bayard G. Keeney read for second time.

Dr. A. L. Wilson moved that the society buy a flag and that it be hung behind the president's chair for each meeting as long as war exists. Motion seconded unanimously and passed.

Dr. E. B. Mumford called attention to the National

Baby Week to be held in May and asked the support of the society. The chair appointed Dr. Mumford to look after this matter for the society, asking the cooperation of such other members as he might think advisable.

PROGRAM

Address: War Wounds and the Gas Bacillus Infection. Dr. J. P. Simonds, Northwestern University Medical School.

Abstract.—As introductory Dr. Simonds described his trip to Bordeaux and through France to Belgium mentioning the military preparations, the astounding number of soldiers, the destruction of villages, the aeroplanes, Zeppelins and the many other evidences of war that were to be seen. Dr. Simonds was stationed at the "Ambulance de l'Ocean" on the coast of Belgium at which hospital they have a photographic history in colors of every wound treated in the hospital.

Wounds mainly caused by high explosive shells, gunshot wounds being rare. No shrapnel wounds. Much tearing and laceration of tissue with sloughing and destruction. Debris in wounds.

Infections.—Tetanus very prevalent. Preventive dose given each patient on admission. Only one case developed. Ordinary wound shows interesting bacterial flora with many varieties. Changes rapidly and in few days narrow down to staphylococcus and streptococcus. Staphylococcus albus remains longer than streptococcus.

Wound Treatment.—Reduction of pain in dressing wounds was a problem. By spraying a local anesthetic on wound, removal of dressing was painless. Free opening of wound and control of infection best measures. Disinfectants for wounds divided into two schools: 1. (a) Sir Watson Chane uses very strong antiseptic solution; (b) Sir Almoth Wright uses hypertonic salt solution with thorough flushing. 2. Carrell-Dakin solution. These men attempted to find a solution, nontoxic, isotonic with tissues and as strongly germicidal as compatible with good results. Use 4,000 gallons each month at Ambulance de l'Ocean. Technic of making solution very intricate. Two methods of using: (1) Constant drop method; (2) small amount every two or three hours. When microscopic examination shows three negative findings, wound is closed.

What is thought of this solution?

(1) Patients dislike it. Burns surrounding skin more than wounds. Protect skin with vaselin.

(2) Nurses abominate solution. Saturates bedding, bleaches uniforms.

(3) Surgeons divided in opinion. Americans very enthusiastic. Surgeons using solution every day are not extravagant in praise. Some claim solution causes additional bleeding. This is doubtful. Wounds do seem to clean up more promptly. Carrell claims 35 per cent. of wounds are sterile. Simonds in every case found organisms by culture although no organisms were found by microscopic examination. Has been mathematically computed that the rate of epithelialization is a function of individual's age and the size of the wound, provided the latter is aseptic.

Objections to Dakin's Solution in Civil Practice.—(1) Difficult to make. (2) Special apparatus necessary. (3) Not adapted to intraperitoneal work.

Gas gangrene in this connection did three things:

(1) Computed percentage of uniform contaminated

by spores causing gas formation. (2) Studied fresh wounds with organisms and determined which wounds developed organisms causing gas gangrene. (3) Investigated therapeutic measures. Uniforms showed 90 per cent. carried the spores of this group of organisms. Further these spores were found in the meshes of new cloth. Sterilization was effective.

Fresh Wounds.—In twenty cases, five were negative for organisms. Of remaining fifteen, three developed gas gangrene. Two factors necessary for growth: (1) Proper degree of anaerobiosis, (2) proper carbohydrate content. Therefore torn muscle tissue deep in wound encourages growth. Pressure developed in tissues by gas from gas producing organism is enormous. Gas forces itself along loose connective tissue. An acid is produced which with the gas pressure produces gangrene.

Logical Treatment.—Open extensively to get rid of anaerobic conditions and remove dead muscle tissue to dispense with carbohydrate content. Inject oxygen into tissues, thus preventing gas formation although not killing organism. Very few amputations were necessary. Rapid recovery generally followed.

The society extended a vote of thanks and appreciation to Dr. Simonds for his excellent address.

Meeting adjourned. Attendance 130.

April 24, 1917

Meeting was called to order by Dr. T. B. Noble, the president. Minutes of previous meeting read and approved. Application of Dr. J. C. Carter was read for the second time and referred to the Council. Application of Dr. L. W. Kuebler read for the first time.

The following resolution was presented by Dr. F. W. Cregor:

WHEREAS, Salvarsan is a drug which is of vital importance to the protection of health and to the saving of life; and

WHEREAS, The patent rights conferred on salvarsan and its congeners have created a monopoly which has permitted a price to be placed on the drug which makes it unavailable to tens of thousands of indigent sick in this country; and

WHEREAS, The drug has hitherto been supplied to this country from foreign shores and the supply during the war has been uncertain, and insufficient; and

WHEREAS, The patents have prevented the preparation and distribution of the drug in this country by American laboratories, and

WHEREAS, The patents conferred are operating against the health interests and the public welfare of this country, therefore be it

Resolved, By the Indianapolis Medical Society, that Congress be earnestly urged to abolish the patents on salvarsan and its closely related products.

The resolution was adopted unanimously by the society with the amendment that a copy be sent to *The Journal of the A. M. A.*

PROGRAM

Case Report: Brain Abscess Following Ethmoid Infection. Dr. J. William Wright.

Abstract: Patient, aged 18, with history of "cold" previous to present illness, reported to hospital suffering from pain in both hands and wrists. After about four weeks' treatment for acute rheumatic arthritis which did not yield satisfactorily, she devel-

oped a swollen and edematous right eye supposed to have been caused by accidentally stabbing finger in eye. The next day a profuse purulent discharge was noticed running from right side of nose. The following day patient was in stupor all day. On third day after eye was noticed oculist was called and wished consultation. On examination the ethmoids and frontal sinus were found to be infected and as patient had been in coma for seventy-two hours operation was deemed unadvisable. Patient died twelve hours later without having regained consciousness. Death due to brain abscess from ethmoid infection.

Case Report: Stricture of the Esophagus. Dr. H. H. Wheeler.

Abstract: In the anatomical description of the esophagus, the doctor pointed out the three natural points of constriction, which are most likely to be involved in stricture of the esophagus. He gave as a general classification of strictures of the esophagus, the benign and malignant. The malignant stricture constituting about 60 per cent. of all strictures of this organ, which occurred more frequently in males and in advanced years. Of the benign strictures the cicatricial stenosis produced by mechanical, chemical and thermic causes are the most frequent type. The degree of contraction depends on the extent of penetration of the mucous membrane. Strictures produced by chemical means are more frequently at the cardiac orifice; but the two cases which he presented have the narrowest point of constriction at the central physiological narrowing at the bifurcation of the trachea. The first case came under the doctor's care five months after swallowing a solution of lye. The child was showing signs of malnutrition and losing weight. Only a portion of liquid foods would be carried into the stomach. A major portion being retained in the esophageal sac, and vomiting shortly afterward. This case has taken ether fourteen times, with apparently no harmful effects. At the latest dilatation a 38 mm. olive tip was passed into the stomach. The second case was a man who had taken carbolic acid with suicidal intent. The esophagus in this case had become impermeable and rectal feeding was resorted to. He reduced from 147 to 87 pounds within six months' time, when a gastrostomy was performed to prevent starvation. Following the gastric feeding he rapidly gained in weight putting on 40 pounds within two months time. After the beginning of dilating the stricture on March 1, this patient has been taking food by mouth and discontinued feeding through the gastrostomy opening altogether. In reporting these two cases the doctor urges the early diagnosis and institution of treatment as a means of guarding against the dense cicatricial contraction which follows chemical destruction of the mucous membrane.

Case Report: A Giant Colon. Dr. T. B. Noble.

Case Report: (1) "Neuritis"; (2) Fracture of the Os Calcis. Dr. E. B. Mumford.

Abstract: Under the ordinary textbook treatments the end-results in these fractures are very poor. Operation indicated in all cases.

Case Report.—M. W., aged 55, fractured os calcis. Operation as follows: Steel sound run in front of tendon Achilles and as close as possible. With counter traction on a steel rod placed across the middle of the bottom of the foot traction made on

steel sound so as to pull posterior fragment of os calcis downward and inward. Tendon Achilles then cut and foot placed in cavus position in plaster cast. Removed at end of thirty days, passive motion and hot applications. Patient returned to work at end of fifty-three days.

Four cases of "neuritis" treated by high frequency current. All were relieved promptly. The writer considers them as spasms of the vasomotor system.

Paper: Then and Now—A Reminiscence. Dr. A. W. Brayton.

Meeting adjourned. Attendance 85.

May 1, 1917

Meeting was called to order by Dr. M. N. Hadley on account of the president's absence. Minutes of previous meeting were read and approved. Drs. Frank Mann, J. C. Carter and S. L. Egart were elected to membership in the society. Application of Dr. S. A. Quimby was read for the first time. Application of Dr. H. J. Lemmon was read for the second time and referred to the Council. Dr. T. B. Noble, president, having arrived, took the chair.

PROGRAM

Paper: The Importance of the Temporal Bone in Surgery. Dr. J. F. Barnhill.

Abstract: The question of focal infection is a growing one and of first interest to both surgeons and physicians. The modern view seems to be that a large number of ailments can be traced to infection arising in some focal area. Opinion differs as to which of the several areas stands first in the causation of such general infection. The intestinal tract is of great importance, likewise the appendix, the gallbladder, the teeth, the tonsils and the several sinuses connected with the nose. It is the belief of the otologist that among all these focal areas none is of greater importance than the area found in the several cells of the temporal bone. The anatomy of this bone is one favorable to the extension of these infections. A large area of its surface is in contact with the dura mater, and the area of the cellular surface, which immediately underlies the dura, is greater than is usually supposed. The cerebellum has the greatest exposure to these mastoid cells, and hence the frequency of sinus disease and of cerebral abscess. All cases of meningitis and of brain abscess have their origin in infection. The number of these diseases arising in the temporal bone probably exceed those arising from any other cause. The profession is too apt to record death from meningitis as a primary disease of the meninges. Meningitis, like peritonitis, is always secondary, because of the fact that deaths, when due to disease of the mastoid, are recorded as meningitis does not give the public or the profession the correct knowledge concerning the danger due to mastoiditis. It is believed that in the near future a greater study of the sinuses of the head, including the cells of the mastoid portion of the temporal bone, will be made, and perhaps a greater interest will be taken in the diseases originating here than has heretofore been true; at any rate, the subject has not been exploited to a sufficient extent to warn those having discharging ears against the serious and frequent dangers arising therefrom.

Paper: Retroversion of the Uterus. Dr. G. B. Jackson.

Abstract: Position of the uterus subject of wide variation normally. Discussion of the anatomy and physics of its support. Statistics and personal observation giving its marked relation to child-bed. Treatment is, therefore, mainly preventive—the proper conduct of childbirth, particularly during the puerperium. Gymnastics, ergot, local applications, and the pessary discussed in relation to inducing involution. Emphasis on importance of immediate or intermediate repair of all lacerations.

DISCUSSION

Dr. T. B. Eastman: Dr. Jackson's paper is a plea for the use of the pessary in retrodisplacements following childbirth. Pessary has a restricted use. Persons will not submit to operations and therefore the pessary is necessary. If uterus is fixed, however, only harm can result. Anyone can operate for suspension of uterus, but it takes skill to properly place a pessary. Immediate application of an abdominal binder following delivery pushes uterus into a retro position. Corsets are wrongly blamed for retrodisplacements. Not all retro positions cause symptoms.

Dr. C. F. Neu: Parts adjoining temporal bone are important as to functions and as to further distribution of infections. There is greater tendency for pus to work through membrane rather than through bone to the brain or sinus. However, the frequency of extension internally is sufficient to warrant our special attention.

Dr. P. B. Coble: In all acute cases of mastoiditis early operation is indicated. Delay only gives a chance for general sepsis. Occasionally have recoveries without operations.

Dr. F. C. Walker: An important point to remember from Dr. Jackson's paper is that the pelvic floor may be ruptured without any apparent injury to the overlying mucous membrane.

Dr. W. S. Tomlin: The petrous portion of temporal bone is the architectural keystone of the skull. Infection at that point therefore gives an excellent opportunity for distribution. All cases of discharging ears are worthy of serious consideration and require attention.

Dr. A. E. Sterne: Rôle played by the temporal bone is very important. We are prone to clear away the apparent cause of infection but do not go back to the original cause or focus. Roots of teeth are not infected from outside but from lymphatics and tonsils.

Dr. J. F. Barnhill (in conclusion): Infection goes brainward oftener than we realize. Temporal bone is one of the greatest centers of focal infection in the body, but it has not been sufficiently advertised. All acute mastoid cases should recover. Some day the layman will demand immediate attention for a running ear instead of allowing complications and death to ensue.

Meeting adjourned. Attendance 80.

May 15, 1917

In the absence of the regular officers, Dr. C. E. Ferguson called the meeting to order. Minutes of previous meeting were read and approved. Applications of Drs. John M. Lee and John Salb were read for the second time and referred to the Judicial Council. Dr. H. J. Lemmon was elected to membership in the society.

Under committee reports Dr. H. E. Gabe, chairman, presented the following:

The committee to devise plans conserving the practice of physicians who may be called into active service of the government, beg leave to submit the following:

Resolved, That the Indianapolis Medical Society recognize the patriotism of those members of the medical profession resident in Marion County who volunteered for the service of the United States government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients shall turn one third of the fees collected from such patients to the physician in active service, or to his family.

2. *Resolved*, That the secretary of this society shall have prepared letter blanks according to form attached, to a number sufficient to supply those physicians who are called into active service, with a sufficient number so that they can send a filled out form letter to each patient, with carbon copy going to the doctor who has agreed to look after the physician's patients, and the second carbon copy be sent to the secretary of this society.

The secretary of this society is instructed to file the carbon copies received by him, and on notification of each physician that he has terminated his service with the government and has resumed his practice, the secretary of this society shall then send out to each of the patients of this physician, whose names and addresses he has received in the filed letters, a letter stating that the physician has resumed the practice of medicine and requesting the patient in the name of the society to recognize the physician's patriotism by summoning him, should he be in need of medical attention.

Signed H. E. GABE,
M. N. HADLEY,
A. C. KIMBERLIN,
T. W. DEHASS,
H. G. HAMER.

Resolved, That the secretary of the Indianapolis Medical Society be instructed to send to every legal practitioner of medicine in Marion County a return post-card bearing the following:

The Indianapolis Medical Society has adopted resolutions to the following effect:

That professional work done by physicians who remain in Marion County during the war, in families who were formerly served by physicians who are in active service of the government, shall be strictly kept account of; that one third of fees collected from said families or patient shall be turned over to such absent physician on his return, or to his family during his absence, and that on his return such patient or families shall be asked to recognize his patriotism by summoning him should they be in need of medical attendance.

Will you not also sign and return the following:

"I wish to show my patriotism by agreeing to care for the professional work which may come to me, of any physician in active government service during this war, according to the plan you have outlined above."

Signed H. E. GABE,
M. N. HADLEY,
A. C. KIMBERLIN,
T. W. DEHASS,
H. G. HAMER.

Proposed Form Letter on regular letter head Indianapolis Medical Society:

Mr.....
.....
.....

Dear.....:

As a member of the Reserve Corps of the United States Army (Navy) I have been ordered into active service of the government, and on that account am writing to you of this fact so that in case of illness you may summon some other doctor to attend you.

In my absence Dr. of.....
..... Telephone No. has kindly consented to attend my patients and I can heartily recommend him.

Sincerely,

P. S. Please present this letter to any doctor whom you may call in to attend you.

Signed H. E. GABE,
M. N. HADLEY,
A. C. KIMBERLIN,
T. W. DEHASS,
H. G. HAMER.

Resolved, That the members of the Indianapolis Medical Society, agree to abide by the resolutions adopted in relation to fees for attendance on patients of doctors ordered into the active service for the government.

In the remoter chances of misunderstanding or disagreement arising under this resolution we agree to submit the facts to the Executive Committee of this society and abide by their decision.

Signed H. E. GABE,
M. N. HADLEY,
A. C. KIMBERLIN,
T. W. DEHASS,
H. G. HAMER.

Dr. Willis moved adoption of resolutions. Seconded by Dr. Sowder. Dr. Willis called attention to the possible difference in fees which might be charged by the physician who had left his practice and the man who took his place. Was decided that inquiry must be made as to fee formerly paid. Dr. Kitchen moved consideration of the resolutions by paragraphs. Seconded by Dr. Willis. Motion lost by rising vote. Original motion of Dr. Willis carried. Dr. G. B. Jackson moved that resolutions be published in city newspapers. Seconded and passed.

Dr. Gabe moved that every thirty to ninety days the society issue a list of the men absent in the war service and give a list of the men doing their work. Seconded and passed.

PROGRAM

Paper: Occupation Neuroses with a Report of Seven Cases of a New Type. Dr. C. E. Cottingham.

Abstract: Occupational neuroses becoming more frequent because of multiplication of machinery and invention. In general their cause is the continuous performance of the same operation employing the same group of muscles without proper relaxation or change in work.

The symptoms in general are pains, neuritis anesthesias, cramps, parasthesias especially acroparasthesias.

There can be no cure so long as the patient pursues the same occupation in the same manner as when the disease was produced. They can be prevented by doing at least two different things employing two entirely different sets of muscles and alternately

working at each for a given period. Recently the author has examined seven cases of an entirely new type that present symptoms of such serious nature as demand investigation by the state and proper protection should be extended to the men afflicted. This is a disease produced among stone-cutters using the air or percussion hammer. It is stated there are more than 300 persons afflicted by this disease in Indiana. The prominent symptoms are: first, swelling of the hands especially in beginning the use of the hammer; second, vasomotor changes. The hands become white on exposure to cold, etc.; third, loss of sensibility. This loss of sensibility in hands can be shown to be present. This loss is to tactile, temperature and pain sense. They show this loss by their tolerance of electricity. They all could tolerate 90 volts of the combined galvanic and faradic current without pain. The meter showed but little electricity went through their hands. Fourth, pain endured. They all complained of severe pains in hands manifested in different manners. They also complained in different manners of loss of sleep, loss of weight, worry and various fears, etc. Difference in blood pressure shown when working and not working.

Paper: Laboratory Diagnosis of Pulmonary Tuberculosis. Dr. Will Shimer.

Abstract: First, 28 per cent. of all persons entering state sanitariums for pulmonary tuberculosis do not have tubercle bacilli in their sputum. Second, 50 per cent. of all persons entering the tuberculosis sanitarium at Rockville, Ind., have never had their sputum examined. Third, only 10 per cent. of the Indiana patients have had a thorough physical and laboratory examination made. Ten per cent. have never had an examination of any kind made and were treated for other diseases, pulmonary tuberculosis not even being suspected by the family physician for several months.

DISCUSSION

Dr. Humes: Explanation of occupation neuroses is practically the admission of a neurotic, mildly hysteroid or so-called neurasthenic condition as the underlying factor. Almost invariably, in my experience, the neurosis following overwork is largely due to either distaste for the occupation or mental irritability because of the unchanging occupation. Very difficult at times to distinguish an occupation neurosis from a beginning multiple sclerosis and tabes; the differentiation having been made establishes the pathology. Unfortunately the victim of these neuroses belong to a class of society that cannot well afford to take prolonged rest which, after all, is the only definite means of a cure. The painful types indicative of a true neuritis are curable; those without sensory disturbances usually are not. No occupation is without its victims and coming, as it does usually, in middle age, after years of hard work and adaptation, it works a tremendous hardship since few of the actual neuroses can be entirely cured.

Dr. Alfred Henry: Statistics given by Dr. Shimer are true and appalling. Fifty per cent. of the patients are not stripped for examination. Only 10 to 15 per cent. of material available for use in diagnosis is used. Sixty-five to 70 per cent. of physicians in a number of states make diagnosis on microscopic findings. Must use every means at hand. Great number of cases overlooked.

Meeting adjourned. Attendance 94.

May 22, 1917

Meeting was called to order by the president, Dr. T. B. Noble. Minutes of previous meeting were read and approved. Application of Dr. J. Q. Wehrman was read for the first time. Application of Dr. L. W. Kuebler was read for the second time and referred to the Judicial Council. Drs. B. G. Keeney, C. E. Orders, John A. Salb and John M. Lee were elected to membership in the society.

PROGRAM

Case Report. Dr. C. D. Humes.

Abstract: Report is intended to emphasize the importance of careful prognosis, once having established the diagnosis. Also intended to bear further testimony to the virtue of a certain old fashioned but very reliable treatment. Also purports to encourage the most careful medical attention to the care of the general health of the patient rather than to consider the stricken luetic as a human test-tube. John R. D. of Chicago, aged 53, Pennsylvania Dutch. Only family neuropathic tendency is in mother of 73, probably paralysis agitans. Always temperate and hard working. I saw him first Sept. 22, 1916. He reports having had a severe nervous breakdown four years before without any palsy following. Two years later weakness and rigidity in lower limbs with pain. Central nervous system showed some sensory disturbance, slight anesthesia; all reflexes exaggerated; ankle clonus bilateral and persistent and positive Babinski; motion restricted in legs and spastic; the tongue not affected. The pupils, left greater than right; both fixed to light. Bladder incontinent, cystoscopic by Dr. Hamer revealing a markedly thickened mucosa. The blood Wassermann was 2 plus; spinal fluid 4 plus, 0.5 c.c. Lange 55555333430, typical paretic. Showed considerable nervous irritability; some aphasia and slight euphoria. Diagnosis: Erbs syphilitic spinal paralysis. Under the direction of Dr. Hamer, the cystitis gradually came under control; nevertheless, he developed a severe left femoral phlebitis and passed through a febrile stage, with attending delirium and unconsciousness. October 15, mercurial inunctions were begun; twice daily bladder irrigations continued. By October 31 he was able to retain urine four hours; the phlebitis had almost subsided but the spastic palsy of the lower extremities remained. November 9, I accompanied him home to Chicago with his nurse. He was still unable to walk and had to be carried. Bladder irrigation and mercurial inunctions were continued. Gradually improvement followed, and in January he began going to his place of business and hobbling about with the use of two canes. Consistent improvement followed, and I report my findings of May 4, at which time I examined him in Chicago, and found him walking about without the aid of a cane. Ankle clonus has disappeared entirely in the right and is exhaustible in the left. Deep reflexes are exaggerated but not so high. There is no anesthesia and only slight Babinski in the left. But slight loss of static equilibrium and but slight incoordination. Left pupil reacts to light; the right does not. Aside from the slight spasticity in the legs, he gets about actively and without marked exhaustion. The blood Wassermann was negative; spinal fluid normal pressure, Wassermann negative to both antigens, the Lange normal. Considering the possibility in such cases of chronic myelitis alone or

combined with primary pyramidal degeneration or of these latter tracts all alone or in combination with the posterior tracts and the fact that this case showed symptoms of involvement of one or all of these tracts mentioned, makes it seem rather remarkable to me that he could have regained so much of his normal functions regardless of treatment, knowing that he had been a victim of this progressive condition for at least four or five years. I consider this case a glowing tribute to the use of mercurial inunctions. He has received no other specific treatment, but has gained 15 pounds in weight and looks like the new man that he is.

Paper: The Early Removal of the Adenoid, Dr. C. H. McCaskey. No abstract submitted.

Paper: Present Status of Certain Phases of the Tonsil Question. Results of Tonsil Enucleation on General Disorders, Dr. D. W. Layman.

Abstract: When the real significance of the relationship of tonsillar infection to systemic disease was made evident, the medical world recognized a new and very important factor in medicine. The result has been a period of great popularity of tonsillectomy as a therapeutic measure in the treatment of systemic diseases. Claims are now made that the tonsil is made responsible for too many diseases and results do not justify the numerous enucleations. To prove or disprove these claims, information from many sources regarding the results of tonsillectomy in the treatment of systemic diseases has been obtained through a questionnaire submitted to laryngologists and internists, and data compiled and results presented. The answers to the questionnaire, confirmed by the figures presented, show that tonsillectomy in the treatment of systemic diseases, when based on rational and well-founded relation of cause and effect, and when performed under the most favorable conditions has given exceedingly satisfactory results. General consideration of preoperative and postoperative measures relative to bettering the results of tonsillectomy were taken up; also the goiter question, where it was shown there was a decided uniformity of opinion among prominent men doing thyroid surgery regarding the relationship between tonsillar infection and the enlargement of the thyroid and hyperthyroidism. The question of tonsillectomy as a prophylactic measure in early childhood was also considered. In view of the reports and attitude of the most prominent pediatricians and health officers of the country, removal of the tonsils in early childhood was advocated in more cases than formerly.

DISCUSSION

DR. W. S. TOMLIN: Dr. Humes' report emphasizes the fact that intensive treatment brings results. Dr. McCaskey's paper is timely. Parents frequently asking concerning proper age for adenoidectomy ought not to delay. Adenoid and other lymphoid tissue act as air filters. If adenoid is hyperplastic and nasal mucous membrane has lost cilia, foul air and infection enter easily. There is a chance for the absorption of toxins by the pituitary gland from the adenoid. Dr. Layman's paper is an interesting one. Often hear that too much tonsil work is done. Opinions from medical men in various lines seem to indicate the advisability of removal.

DR. E. L. MITCHELL: Abnormal conditions are due to perverted functions. We must preserve the normal. If adenoids are removed early a normal development

of the upper lip, face, mouth and palate is allowed. Pressure of tongue on palate helps develop the lips. Swallowing is a stimulant to development of nasal cavities. Eruption of teeth carries alveolar process forward normally. Nondevelopment of jaw gives same nondevelopment in nasal cavities. Therefore before mouth breathing, caused by adenoids, gives a chance for malformations, remove the adenoid. Early removal of tonsil and adenoid has a good effect on proper future development. Orthodontist must work hand in hand with laryngologist and rhinologist.

DR. C. P. EMERSON: Consecutive infections and not a single infection cause trouble. We have been drawing conclusions from isolated cases. Have not used method as much as we might. Removal of diseased tonsils and teeth absolutely indicated. We have been underdoing instead of overdoing. Great optimism has followed the excellent results obtained. However, improvement noted in summer is followed by return of symptoms in winter. The infections are metastatic. If joint, renal or cardiac conditions are present they will not necessarily quiet down following the removal of the portal of entry or primary focus. Another reason for unsatisfactory results is the presence of infection in the pharynx, sinus and nasal cavities. Do not stop with removal of tonsils. Remove all foci. Our results are better than we had a right to expect. Age of person does not enter into question. Mentioned case, person over 60 years, who had nephritis and cardiac involvement. Removal of infected teeth and tonsils paved the way for a marked improvement. We will do more good by being too radical than by being too conservative. General discussion.

DR. ADA SCHWEITZER: Does tonsillectomy accomplish any good for diphtheria carriers?

DR. L. F. PAGE: Advocated early removal of tonsils and adenoids sixteen years ago. Recommended procedure before reaching second year. Bad sequelae might have been avoided. Removal of tonsils often causes disappearance of infection in antrum, sinus, mastoid and middle ear. Cited case with chronic stomach symptoms with low HCl content. Cancer considered. Removal of tonsils, purely on suspicion, caused subsidence of stomach symptoms.

DR. E. A. WILLIS: Informed that tonsil should not be removed before the fifth year. Surprised that Dr. Layman did not consider effects of toxins, from tonsillar crypts, carried by the blood and lymph streams.

DR. D. W. LAYMAN (in conclusion): Cited a case in which curettage of tonsillar crypts was followed by evidences of severe toxemia. An autogenous vaccine was given previous to tonsillectomy. No bad results followed excision of tonsils. Vaccine no doubt an aid in this case.

Meeting adjourned. Attendance 60.

L. H. MAXWELL, Secretary.

CARROLL COUNTY

Carroll County Medical Society is having the largest percent. of attendance this year it has enjoyed for several years.

Dr. John Sluss of Indianapolis met with the society at Camden on April 13, and gave an interesting talk on the treatment of wounds in the European war.

The Program Committee decided to have all talent from outside the county this year, and on account of the war some little difficulty in securing speakers is being experienced. W. R. QUICK, Secretary.

DELAWARE COUNTY

Meeting of April 6

Regular meeting of Delaware County Medical Society was held in Muncie Y. M. C. A. Building, Friday evening, April 6th, and was called to order at 8:15 by President F. W. Dunn.

A. C. Kimberlin of Indianapolis made a remarkably able and comprehensive address on "Renal Infections," from which the following was abstracted: You probably have noticed the passing of "Bright's disease" from medical parlance. A name explaining a general disease involving the kidney is no longer permissible. Infections of the kidney are common; either becoming more so or else more easily recognized. The colon bacillus making its invasion through the lymph channels is not such a frequent occurrence as was formerly supposed. In females the infection often enters through the urethra. The kidney attempts to eliminate all bacteria no matter what the mode of entrance, which in the large majority of instances is by the blood stream. Misplaced kidney may become infected because of obstruction. Infected tonsils and other focal infections are important etiologic factors in kidney infections. In nearly every case where there is a continuous elevation of temperature with obscure symptoms, suspicion points to the kidney. Urinary findings in certain conditions are not dependable. An abscess in the cortex may produce no urinary changes. Infection of the kidney will usually be found to be one of three types caused by the tubercle bacillus, pneumo-streptococci, or the colon bacillus.

The establishment of the colon bacillus always means a chronic condition. When the glomerulus is involved there is a different clinical picture than when the arteries are affected. When we have edema the glomerulus is diseased. When solids in the urine are involved the tubules are infected. Colon bacillus thrives in the urine. When the colon bacillus has spent its force the result is usually a contracted kidney.

The phthalein test is one of the most useful functional tests for the kidney but tells nothing about the heart or arteries and fails utterly in the presence of asthma, broken compensation or anemia.

The treatment of many cases of kidney infection is surgical. Probably the best drug is formaldehyd in one of its medicinal forms. Small doses frequently repeated are preferable to larger doses at greater intervals. The best agent for rendering the urine acid is acid phosphate of soda.

The subject was discussed by G. R. Andrews, C. A. Ball and C. M. Mix. Dr. Ball asserting that in his experience many cases of renal infection closely followed infectious diseases.

Adjourned.

H. D. FAIR, Secretary.

DELAWARE-BLACKFORD COUNTY

Regular meeting of Delaware County Medical Society was held in Muncie Y. M. C. A. building Friday evening and was called to order at 8:15 by President F. W. Dunn.

Dr. E. H. Clouser was elected to membership.

At this meeting the official union of Delaware and Blackford counties' medical societies was consummated and the joint societies adopted the name Delaware-Blackford Medical Society.

The address of the evening was given by Alfred Henry of Indianapolis, who spoke on the Home Management of Pulmonary Tuberculosis. Dr. Henry said: Too much attention is given to the scientific side of the treatment of tuberculosis and not enough to the exercise of common sense. When we know that drugs do not cure tuberculosis why quibble over their selection or the method of their administration? When I accept a patient for treatment, the first thing I try to impress on his mind is that there must be no deviation from rules. Unless he is under discipline similar to that of a soldier the treatment is likely to fail. Sometimes it is difficult to convince the patient or his friends that he really has tuberculosis. Under such circumstances it is impossible to get absolute control, and no half-hearted interest or tardy cooperation should be tolerated. In the management of tuberculosis we should forget drugs and pharmacies, pills and tonics. Learn to lean on two things, rest and fresh air. I believe the patient should spend much time in bed. Every tuberculous patient should get a thermometer and learn how to use it. If the afternoon temperature goes to 99.5 F. I allow him only one hour out of bed the following morning. If it reaches only 99 F. I allow him two hours. If it reaches 100 F. or more I do not allow him to sit up at all. By fresh air I do not mean that he must necessarily be out under a tree, a room with the windows open contains fresh air; but I want him to get it twenty-four hours every day. Every hour spent with the folks in the common warm sitting room is lost. All advanced cases of tuberculosis have gastro-intestinal trouble of some kind. If appetite fails, bitter tonics are *not* indicated, because no extra food can be digested. Rest causes the appetite to return. I never force a patient to eat what he dislikes simply because it is supposed to be "good for him." Relished foods give the best service. Rest will also reduce cough and aid digestion.

The foregoing outline, if put into effect, will cure 2,000 of the 4,000 who die of tuberculosis in Indiana every year. If it seems advisable to do something more, I believe the administration of autogenous vaccines will give the best results. I believe it a mistake to resort to surgery when we deal with tuberculous glands. In spite of some recent literature, I believe ether aggravates pulmonary tuberculosis. As mental conditions have much influence on the patient's physical welfare, he should have no worries, financial or otherwise. Familial nagging and annoyances retard recovery; yet homesickness may overbalance all benefit a patient may receive by being sent away from home for treatment. Many patients are better off without any company whatever. Quarantine the room if necessary.

I believe there is no field in medicine so poorly covered as the early diagnosis of tuberculosis. No physician can detect early tuberculosis because there are no objective signs. Only 1 per cent. of early consumptives have positive sputum; and less than 10 per cent. are diagnosed. Loss of weight in a given time; afternoon elevation of temperature; cough; loss of appetite, and a tired feeling of definite duration should arouse our suspicion. In suspected cases it is well to record the temperature on ten consecutive

afternoons. Some days the tuberculous patient may have a normal temperature.

The subject was discussed by J. H. Williams, C. E. Sellers, W. W. Wadsworth and O. E. Spurgeon.

Adjourned.

H. D. FAIR, Secretary.

MADISON COUNTY

Madison County Medical Society met in Anderson May 22, at 4 p. m., Dr. Doris Meister, vice president, in the chair.

Dr. Etta Charles reported a case of pyemia in a woman five months pregnant, and verified her diagnosis by the microscopic findings. The question was raised as to whether it would be proper to abort this case.

Dr. F. G. Keller spoke of cervical and parotid gland infection from the tonsil. He thought in many cases the tonsil could be blamed. Dr. Mobley spoke of a large number of cases he had of tonsillitis in which there was a stiffness of the neck and a peculiar condition of the tonsil. Painting with tincture of iodine relieved, and further treatment consisted of true salicylate of soda.

Dr. Charles spoke of the good results secured in treatment of dysmenorrhea by using a tent in the cervix prior to the period.

Dr. Tracy spoke of the great aid of the Roentgen ray to the general practitioner. Said ulcer and cancer of stomach could be verified in 97 per cent. of cases; syphilitic and tuberculous periostitis could be differentiated by the Roentgen ray, and spoke of great number of pus pockets located in this way.

A committee was appointed to formulate plans for caring for physicians' practices who enter military service, their dependents to receive a percent. therefrom. Adjourned.

SETH IRWIN, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

PARRESINE.—A mixture composed of paraffin, 94 to 96 per cent.; gum elemi, 0.20 to 0.25 per cent.; Japan wax, 0.40 to 0.50 per cent.; asphalt, 0.20 to 0.25 per cent., and eucalyptol, 2 per cent. Parresine acts mechanically. It is used in the treatment of burns, "frostbite," "chilblains" and for covering denuded surfaces. For use parresine is melted and applied while liquid by means of an atomizer or brush. The Abbott Laboratories, Chicago (*Jour. A. M. A.*, May 12, 1917, p. 1406).

SIOMINE.—Hexamethylenamine tetraiodide, containing 78.5 per cent. iodine. Siomine is decomposed in the intestine with formation of hexamethylenamine and iodide. It produces the effects of ordinary iodides, from which it differs only in that, being insoluble in water, it may be administered in solid form. It is

marketed in the form of Simonine Capsules containing, respectively, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2 and 5 grains of siomine. Howard Holt Co., Cedar Rapids, Iowa (*Jour. A. M. A.*, May 12, 1917, p. 1406).

STERILE AMPULES OF MERCURY SALICYLATE, $1\frac{1}{2}$ GRAINS.—1 Cc. of suspension containing $1\frac{1}{2}$ grains mercuric salicylate in a fatty vehicle solid at ordinary temperature. Each ampule contains more than 1 Cc.

STERILE AMPULES OF MERCURY SALICYLATE, 2 GRAINS.—Each 1 Cc. of suspension contains 2 grains of mercuric salicylate in a fatty vehicle solid at ordinary temperature. Each ampule contains more than 1 Cc. of suspension. Hynson, Westcott and Dunning, Baltimore (*Jour. A. M. A.*, May 12, 1917, p. 1407).

DIARSENOL.—A proprietary brand of arsenophenolamine hydrochloride, chemically identical with salvarsan. For a discussion of the action, uses, chemical and physical properties see New and Nonofficial Remedies, 1917, under salvarsan. Diarsenol is marketed in hermetically sealed ampules containing, respectively, 0.1 Gm., 0.2 Gm., 0.3 Gm., 0.4 Gm., 0.5 Gm., 0.6 Gm., 1 Gm., 2 Gm. and 3 Gm. diarsenol. The Council accepted diarsenol for New and Nonofficial Remedies as the available supply of salvarsan appeared to be insufficient to supply the demand, and this preparation conforms to the rules of the Council for acceptance of proprietary preparations. Diarsenol is made in Canada by the Synthetic Drug Company under a license issued by the Commissioner of Patents of Canada. The Farbwerke-Hoechst Company, however, announces that the sale of brands of arsenophenolamine hydrochloride other than that sold as salvarsan is, in its opinion, an infringement of its rights. The company states that all violations of these rights will be prosecuted under the law (*Jour. A. M. A.*, May 12, 1917, p. 1407).

SOFOS.—A mixture of sodium dihydrogen phosphate and sodium hydrogen carbonate rendered stable by coating the particles of one of the constituents with disodium hydrogen phosphate. One part of sofos has the same phosphate value as 1.75 parts sodium phosphate U. S. P. When sofos is treated with water, sodium phosphate (Na_2HPO_4) is formed and carbon dioxide is set free. Sofos has the physiologic action of sodium phosphate. It is claimed to have an advantage over the effervescent sodium phosphate preparations in that it is free from citrate or tartrate. The General Chemical Co., New York City (*Jour. A. M. A.*, May, 26, 1917, p. 1551).

PROPAGANDA FOR REFORM

PREPARATIONS OF THE PITUITARY GLAND.—The last edition of the Pharmacopeia, recognizing that the best attested field of usefulness for pituitary extracts is in obstetrics, adopted the test of their activity on the uterus of the guinea-pig according to the method of G. B. Roth of the U. S. Hygienic Laboratory. Roth now reports on the activity of seven commercial samples, the products of five American firms. Four of the samples were found of Pharmacopeia strength; the other three were much weaker. Those preparations which have been accepted by the Council on Pharmacy and Chemistry for New and Nonofficial Remedies corresponded to the pharmacopeial requirements. Roth's work shows that the blood pressure method for determining the activity of pituitary prepa-

rations is not a satisfactory method for determining the activity of a preparation on the uterus (*Jour. A. M. A.*, May 5, 1917, p. 1325).

WHEELER'S TISSUE PHOSPHATES.—This is advertised as a "nerve food" and a "nutritive tonic." L. E. Warren of the A. M. A. Chemical Laboratory has analyzed this semi-secret proprietary and reports that it is a mildly bitter, flavored syrup which contains nearly 12 per cent. of alcohol, small quantities each of calcium phosphate and hydrochloric acid and insignificant quantities of iron and quinin salts. From the analysis it is evident that Wheeler's Tissue Phosphate is an unscientific, shotgun mixture whose most active and powerful constituent is the alcohol which it contains (*Jour. A. M. A.*, May 5, 1917, p. 1337).

FROSTILLA.—The lotion for chapped hands is, according to the *Druggists' Circular*, a quince seed mucilage containing alcohol, glycerin and perfume (*Jour. A. M. A.*, May 5, 1917, p. 1341).

DATING OF BIOLOGIC PRODUCTS.—William H. Park, Director, Bureau of Laboratories, Department of Health, City of New York, endorses the recently adopted requirements of the Council on Pharmacy and Chemistry that biologic products to be acceptable for New and Nonofficial Remedies must bear a statement of their date of manufacture. He believes that these requirements might well be made more specific and stringent. The rules of the New York Health Department governing the distribution of biologic products are: 1. The label on all bacterial vaccines must state the date the suspensions are made, standardized and killed. 2. The label on all serums other than antitoxin shall state the date of bleeding. 3. The label on antitoxins shall give the date when the preparation was last tested. 4. The label on vaccine virus shall have the date when the virus was last tested. Dr. Park states that there is no intention of extending the potency date of bacterial vaccines (four months) or of serums (nine months) other than the antitoxins until there are very specific data on which to act. For vaccine virus 100 per cent. of "takes" is demanded (*Jour. A. M. A.*, May 12, 1917, p. 1428).

SALVARSAN IN TABES WITH OPTIC ATROPHY.—Some assert that salvarsan occasionally produces optic atrophy; others with extensive experience believe that it has no injurious effect on the eye. If given at all, it should be administered early in the disease (*Jour. A. M. A.*, May 12, 1917, p. 1430).

K-Y LUBRICATING JELLY.—The composition of this proprietary has not been divulged. Probably a simple tragacanth jelly will produce the same effects as this proprietary preparation. At the German Hospital, Philadelphia, a jelly made from tragacanth, 3 gm., glycerin, 25 c.c., phenol, 1.5 gm., with water to make 300 c.c. has been used for years (*Jour. A. M. A.*, May 12, 1917, p. 1430).

MORE MISBRANDED NOSTRUMS.—The following "patent" medicines have been found to be marketed in contravention of the requirements of the U. S. Food and Drugs Act, chiefly because the medical claims were found untrue: Whitehall's Megrimine, capsules containing acetanilid, caffeine and salol (in one instance also capsules containing antipyrine and capscicum).—Brown's Blood Treatment, a liquid containing mercury and iodid.—Classe's Great Penetrating Liniment, an alcoholic solution of ammonia, chloroform, opium, camphor, oil of sassafras, oil of

origanum and a thujone-containing oil.—Brown's "935" Injection (Formerly H. W.), a dilute solution of acetate and sulphate of zinc (*Jour. A. M. A.*, May 12, 1917, p. 1427-1428).

BIOLOGIC THERAPY IN THE WAR.—According to G. W. McCoy, Director Hygienic Laboratory, U. S. Public Health Service, there are five biologic products—vaccine virus, diphtheria antitoxin, tetanus antitoxin, antimeningococcus serum, and antityphoid vaccine—which may be regarded as indispensable in connection with conditions which prevail when large bodies of men are brought together. The firms manufacturing these products can, if need be, meet the demands of our own army and civilian population as well as those of our allies. McCoy believes that with the good sanitary conditions that may be expected to prevail in our concentration camps, the need for vaccine agents not thoroughly tried out, such as antidyserentery serum, antipneumococcus serum, and vaccines against dysentery, cholera and epidemic meningitis, should not be extensive with the possible exception of the meningococcus vaccine (*Jour. A. M. A.*, May 12, 1917, p. 1413).

EXAMINATION OF AMBRINE AND VARIOUS PARAFFINS.—P. N. Leech of the A. M. A. Chemical Laboratory reports on the composition and properties of Ambrine and the various preparations proposed for the treatment of burns. He finds that the French proprietary Ambrine—exploited in the United States as Hyperthermine and Thermozine—is essentially paraffin in which a small amount of a fatty oil and asphalt is incorporated. A preparation similar in composition but superior to Ambrine in physical properties may be made by dissolving 3 to 5 drops asphalt varnish in 1.5 Cc. of olive oil and adding this to 97.5 Gm. melted paraffin melting at 47.2 C. It is probable that for most purposes simple paraffin will answer just as well as Ambrine or the mixtures proposed in its place. Whether used alone or in mixtures, the physical properties of the paraffin are most important. Paraffin U. S. P. will not answer, and hence the properties of many commercial brands of paraffin were determined and the best products are designated (*Jour. A. M. A.*, May 19, 1917, p. 1497).

NUTROLACTIS AND GOAT'S RUE.—Drugs which stimulate the secretion of milk are unknown to science. Yet the proprietary Nutrolactis (The Nutrolactis Company) is claimed to increase the milk supply of nursing mothers. Since dependence on a preparation of this kind is liable to cause neglect of the only means of increasing the milk supply of nursing mothers—care of the general health and a sufficient quantity of proper food—Prof. A. J. Carlson and Marion Lewis of the Hull Physiologic Laboratory of the University of Chicago studied this proprietary and the drug goat's rue (*Galega officinalis*), which the proprietors of Nutrolactis hint as being the potent constituent to determine their effects on nursing animals with the intention of extending the study to nursing mothers if the animal trials warranted this. The animal experiments showed that neither Nutrolactis nor goat's rue had any effect on the milk supply of nursing goats or dogs. The Council on Pharmacy and Chemistry, which had caused the study to be made, endorsed the work of Carlson and Lewis, and held that the claimed galactagogue effects of Nutrolactis and the drug goat's rue had not been substantiated (*Jour. A. M. A.*, May 26, 1917, p. 1570).

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BOOK REVIEWS

GENERAL MEDICINE. Volume I of the Practical Medicine Series for 1917. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College; Assisted by Burrell O. Raulston, A.B., M.D., Resident Pathologist, Presbyterian Hospital, Chicago. Cloth, \$1.50; Price of the series of ten volumes, \$10.00. The Year Book Publishers, Chicago.

In this small volume of nearly four hundred pages the authors review the important developments in the field of internal medicine made during the past year. Those who follow these reviews already know the thoroughness with which Billings and his co-worker do their task. Those who do not know can be assured that it would be to their advantage to find out without further delay.

SURGICAL CLINICS OF CHICAGO. Vol. 1, No. 2, April, 1917. With 99 illustrations. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

This is the second of these surgical clinics, and, like the initial volume, it contains a number of very interesting and very instructive clinics by some of the most eminent clinical surgeons of Chicago. By following these clinics as they are published the physician—no matter where he may be—has the opportunity of keeping in touch with the latest developments in almost every branch of clinical surgery. Post-graduate instruction is brought home to him in these clinics. There are, indeed, not very many practicing physicians who do not need such a course of instruction right along.

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PULMONARY TUBERCULOSIS. A Handbook for Students. By Edward O. Otis, M.D., Professor of Pulmonary Diseases and Climatology, Tuft College Medical School, Boston; Formerly Visiting and Consulting Physician to the Massachusetts State Sanatorium (Rutland); Consulting Physician to the Boston Dispensary, Tuberculosis Department, etc. 12mo, 220 pages, with 16 full page illustrations. Cloth, \$1.75. Boston: W. M. Leonard, Publisher, 1917.

This book is intended primarily for medical students of the third and fourth years. It is intended to serve as a handbook in which the student can readily and easily find much that may be helpful in his study of tuberculosis.

The author is quite right when he says, "most of what the book contains is the common knowledge of the physician." Indeed, this book is nothing more than a summary of what already is known about pulmonary tuberculosis, presented in a brief, concise manner. Such a book the student may or may not find useful, depending on whether he prefers a small, incomplete monograph or a good, standard text in which the subject is treated completely and in an authoritative way. Certainly there is no good reason why the physician should prefer such a book to one of the few standard texts that have just recently been published.

THE NEWER METHODS OF BLOOD AND URINE CHEMISTRY. By R. B. H. Gradwohl, M.D., Director of the Pasteur Institute of St. Louis and the Gradwohl Biological Laboratories; and A. J. Blaivas, assistant in the same; Sometime Technician in Pathological Chemical Laboratories, New York Post-Graduate Medical School and Hospital; and Former Assistant, Chemical Laboratory, St. Luke's Hospital, New York City. With 65 illustrations and 4 color plates. Cloth. St. Louis: C. V. Mosby Company, 1917.

Its title designates the scope of this new book. In it the authors give the newer methods of studying the chemistry of the blood and urine. They give the technic just as they carry it out in their own routine and research laboratory work. There is, of course, nothing original in this work, and the authors confess that they "lay but little claim to originality." In fact, they might have stated that they lay *no* claim to originality. However, they may feel gratified in the assurance that their labor has by no means been in vain. They have presented to the profession a book that is really needed by many and that will be appreciated to the fullest extent. The book is one of unusual merit in every respect. The subject matter is presented briefly and so clearly that it can be followed with no trouble whatever by any medical man with average ability and intelligence. The quality of the book as regards paper and workmanship is of the highest standard. The illustrations are all clear and very good, some of them unusually good.

This book ought to and will be of great value in the hands of those who feel the need of such a work.

THE STARVATION TREATMENT OF DIABETES. With a Series of Graduated Diets. By Lewis Webb Hill, M.D., Junior Assistant Visiting Physician, Children's Hospital, Boston; Alumni Assistant in Pediatrics, Harvard Medical School; and Rena S. Eckman, Dietitian, Massachusetts General Hospital, 1911-1916. With an Introduction by Richard C. Cabot, M.D. Third edition. Cloth. Boston: W. M. Leonard, Publisher, 1917.

It is a great pleasure again to grant the most favorable editorial comment on this book, even more

so than on the occasion of its first and second editions. The time that has elapsed since its first appearance—although only comparatively short—has demonstrated its real value to the practitioner who is called on to solve the problems of the diabetic.

This new edition has been generally revised, increased by 16 pages, the diet lists have been rewritten, and the recipes have been rewritten and increased in number. Attention is called to the final table which exposes, as not only useless but actually dangerous, many of the foods, flours, and meals widely advertised for diabetics. Such information every practicing physician must have.

The publisher is quite right when he writes that this book "needs no introduction." It is, indeed, already very well known, and every new edition will serve to enhance its value and to make it even better known and more popular.

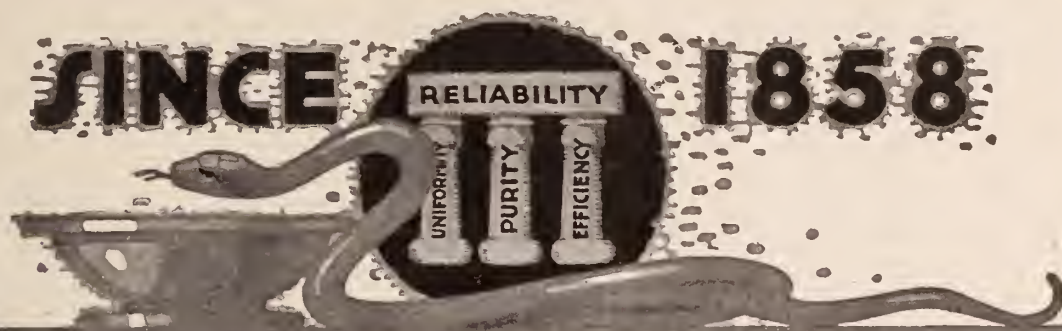
THE MEDICAL CLINICS OF CHICAGO. Volume 2, Number 5, March, 1917. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

A very interesting clinic on anaphylaxis is given by Tice. Abt gives a splendid talk on pyelitis in infancy and childhood. Williamson presents three interesting cases of pericarditis. Kretschmer discusses the fulguration treatment of bladder papillomata. Hamill's clinic is on paralysis agitans. Beifeld discusses chlorosis quite extensively. H. H. Schuhmann, oral surgeon to Michael Reese Hospital, emphasizes the importance of oral infection in its relationship to systemic disease. Solomon Strouse's paper on "Inanition in the Treatment of Diabetes Mellitus" is given in this volume. Mix's clinic consists of two very interesting rather unusual cases. Frank Wright points out the value of the two-hour renal test worked out by Mosenthal for the determination of kidney function. Smithies gives a clinic on retroperitoneal sarcoma; Corbus, on the treatment of specific nephritis, and Friedman on the diagnosis and treatment of constipation. Quite a number and variety of splendid clinics by eminent clinicians, indeed!

STATE BOARD QUESTIONS AND ANSWERS. By R. Max Goeff, M.D., Professor of Clinical Medicine at the Philadelphia Polyclinic; Assistant Professor of Clinical Medicine, Jefferson Medical College; Assistant Visiting Physician to the Philadelphia General Hospital. Fourth edition, thoroughly revised. Cloth, \$4.25 net. Philadelphia and London. W. B. Saunders Company, 1917.

There is scarcely any advanced medical student or a physician in this country who is not already familiar with this work. This new edition has been necessary to make the book of as much value at present as it has been in the past. In the four years since the last edition appeared a great deal of progress in more than one branch of medicine has been made. Questions bearing on these newer developments are being asked by State Board examiners with increasing frequency. In order to keep this work up to date these questions and their answers had to be included. In this new edition the text has undergone a thorough revision and the new material has been added. Thus the work again has been brought up to date.

That there is a wide, popular demand for this book cannot be doubted. The frequency with which it has been reprinted indicates that beyond question. Obviously this book fills a real need. Its popularity must be well merited, and so long as it continues to be up to date and quite complete it will continue to enjoy the wide popularity it already has attained.



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CONTENTS

ORIGINAL ARTICLES	PAGE	EDITORIALS	PAGE
Factors Which Contribute to Safety and Success in Surgical Procedures. J. C. Fleming, M.D., Elkhart, Ind.	269	Epidemic Meningitis.....	291
The Evolution of a Splint for the Femur. George F. Beasley, M.D., Lafayette, Ind.....	276	Government "Red Tape" Should Be Abandoned.....	291
A Working Knowledge of Ophthalmology and Otolaryngology for the General Physician. George W. Spohn, M.D., Elkhart, Ind.....	286	Patriotism Not Confined to Those Who Go to War.....	292
		War Censorship	292
		Do Your Duty!	293
		Editorial Notes	293

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		MISCELLANEOUS	
	PAGE		PAGE
Bartholomew County	300	Deaths	295
Delaware-Blackford County	300	News Notes and Personals.....	296
Madison-Grant County	301	Therapeutic Notes	299
Noble County	301	The Truth About Medicines	302
Posey County	301	Book Reviews	303
Pulaski County	301		

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VOLUME X

FORT WAYNE, IND., JULY 15, 1917

NUMBER 7

ORIGINAL ARTICLES

FACTORS WHICH CONTRIBUTE TO SAFETY AND SUCCESS IN SUR- GICAL PROCEDURES *

J. C. FLEMING, M.D.
ELKHART, IND.

The progress of the science and art of surgery during the past twenty-five years has been truly marvelous. In this achievement American surgeons have contributed a large part, and it is a source of justifiable pride to know that the United States now has the largest and best clinic in the world and many that compare very favorable with any in Europe.

Many of the problems of surgery have been solved, and most surgical procedures have become relatively safe. However, when one takes a careful and honest inventory of operative results he must frankly confess that there is still an appreciable mortality and morbidity and a certain percentage of failures which are preventable. This is true not only in the work of the average operator, but also in that of the most expert. It is to the consideration of some of these factors that will increase the so-called margin of safety and minimize the percentage of failures after surgical procedures to which I wish to direct your attention and invite your discussion.

The Importance of Correct Diagnosis.—One of the most important factors which contribute to unsatisfactory results in surgery is the failure to make a correct diagnosis. It is true that he who assumes the responsibility of performing a surgical operation should be competent to meet whatever emergency arises, but if he has a clear conception of the pathologic conditions present, or, in other words, if his diagnosis is

correctly made, his plan of operation carefully mapped out, his results will be better than if he blunders along on a doubtful diagnosis. A modern diagnosis in the large majority of cases requires two things:

1. A preliminary period of observation before operation, preferably in a well-equipped hospital.

2. The combined services of men trained in the various lines of medicine. In other words, "team work." As David Riesman says: "In all spheres of life the best work is team work, and the best team for the cure of human ills is the great medical triumvirate—the laboratory man, the surgeon and the sane level-headed physician." Not only should the patient's disease be correctly diagnosed, but his condition as regards his ability to take an anesthetic and to stand the operation which is proposed for his relief.

As we analyze the cases which may be classified as surgical failures, we find that, excluding those of malignancy, in many of which failure is inevitable, they fall into two large groups:

1. Cases incorrectly diagnosed—operated for wrong diseases, that is, appendices removed for lesions of the right kidney; gallbladders drained when duodenal or gastric ulcer was the cause of the patient's illness or even incipient pneumonia operated on for appendicitis. In the large majority of such cases it is the lack of time and care spent in making the diagnosis. In other cases it is the result of having one's attention focused on one organ and failing to examine the other organs which might be diseased. The wisdom of making an incision sufficiently large to examine all the abdominal organs cannot be questioned, and when the abdomen is open not only should we make a careful examination of all the viscera, but a permanent report of the condition of each organ should be made a part of the patient's history and the hospital record.

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

2. Perhaps the larger group of surgical failures are neurotics. Many of these should never have been operated on. Their symptoms may have been quite definitely limited to one organ, but their disease is a neurosis and not an organic lesion. Indeed, it is quite often difficult to distinguish between these conditions, because in a given case we may have a pure neurosis, or a combination of a neurosis with an organic lesion. In other words, the clinical picture of an organic affection may be greatly exaggerated or distorted by the neurotic element. As an aid to understanding these cases, a paper written by Dr. Hugh T. Patrick a few years ago on the "Association of Functional and Nervous Diseases" is most helpful. In other cases patients have been relieved from the pathologic conditions from which they suffer, but have continued to complain and to attribute all their ill feeling to the operation. These cases emphasize the importance of reexamination following operation, which will be discussed later.

Choice of Anesthetic.—The question of anesthesia is much like that of American politics. Men of great ability and experience often hold diametrically contrary opinions as to the relative value of the various anesthetics. For example, at Rochester ether is considered the safest and most satisfactory agent for all purposes, and there one seldom sees any other anesthetic administered. At Cleveland, nitrous oxid combined with a local anesthetic and a minimum amount of ether has been considered the chief factor in securing a wonderful reduction in the mortality in surgical procedures. With such conflicting opinions among men equally eminent in the profession, every one is forced to formulate his own deductions based on his own experience. My conclusions regarding anesthetics are as follows:

1. The choice of anesthetic is, in many cases, a very important factor in determining the mortality of the operation.

2. Every patient should be submitted to a rigid examination to determine which anesthetic is safest in that individual case.

3. Ether is a relatively safe and a very satisfactory anesthetic for a large majority of patients.

4. Nitrous oxid combined with just enough ether to secure relaxation is more satisfactory from the standpoint of the patient and quite a little safer as a routine procedure than straight ether.

5. Ether is not the safest anesthetic for the handicapped patient. Patients over 65 are very

liable to develop postoperative pneumonia after an administration of ether, and when you approach 80 or 85 the administration of ether is almost equivalent to issuing a death certificate. Patients with bronchitis or tuberculosis should not take ether. It often precipitates a bronchopneumonia, which may prove fatal or require weeks for recovery. The administration of ether or chloroform in prostatic or in septic or jaundiced cases increases the risk very much. Nitrous oxid combined with local anesthesia is the anesthetic of choice. If nitrous oxid is not available a large dose of scopolamin and morphin combined with a very small amount of chloroform is preferable to ether.

6. As some one has suggested, we have the "ether habit," but the more we use nitrous oxid and minimize the use of ether the more we are satisfied that Crile's deductions are correct.

Intestinal Obstruction.—A review of the results obtained in intestinal obstruction and perforations of the stomach and bowels certainly demonstrates that there is still room for improvement in this class of cases. The present mortality in obstructions approaches 50 per cent., Deaver reporting 276 cases of acute intestinal obstruction occurring in the last ten years in the German Hospital that showed a mortality of 42 per cent. This is perhaps lower than the general average. Moynihan says that he should not be surprised if all cases were recorded there would be not more than one success to five failures. This high mortality is due to two causes:

1. The failure of the mass of the profession to realize the importance of the "acute abdomen" and the fact that if we expect a patient to have a reasonable chance of recovery he must be operated on within the first forty-eight hours. If the diagnosis is not made until the third day, the mortality mounts to 65 or 70 per cent., and on the fourth day or later chances for recovery are very remote. It is true that the early recognition of obstruction is often very difficult, but as the conditions with which it is liable to be confused are nearly all surgical the demand for early consultation between the internist and the surgeon is most urgent.

2. The responsibility for this mortality rests also, but to a less extent, on the surgeon because the principles involved in the management of these cases are not clearly enough understood. Perhaps our greatest error is the failure to recognize the importance of dealing with the toxic intestinal contents. We operate, relieve the obstruction, and are surprised to see the patient

die within twenty-four or forty-eight hours from toxemia. Ninety per cent. of intestinal obstructions are in the small intestines, and if the obstruction has existed more than a few hours the obstructed loop should be brought out of the abdomen, carefully surrounded by hot packs, opened and emptied by inserting a straight glass tube after the method of Myonihan. Mixter, who has had an extensive experience in these cases, believes that multiple punctures with a trocar and closure with a purse-string suture is the best way to relieve the distended bowels. In a few desperate cases, after relieving the obstruction, I have sewed a small catheter into the bowel after the manner of Witzel's gastrostomy and then lightly fastened the intestine to the abdominal wall by two or three fine catgut sutures, and have been surprised to see a favorable outcome. On withdrawing the catheter in three or four days the opening closed spontaneously.

In obstructions of the large bowel which are usually due to malignancy, our results would be greatly improved if we would content ourselves with relieving the obstruction at the first operation, leaving the removal of the growth for a subsequent date when the bowel wall has regained its vigor and the toxic intestinal contents have been diverted away from the operative field. For this purpose we have a choice between appendicostomy, ileostomy, as suggested by Brown, or a right or left-sided colostomy. In those growths affecting the descending colon and sigmoid when the obstructive symptoms are not too great, the procedure of Mikulicz of loosening up the bowel and bringing the growth outside the abdomen, to be removed two or three days later, is probably the safest procedure. When the large bowel is distended with gas, as sometimes occurs in obstructions due to bands, adhesions, etc., it is an excellent plan to have the nurse pass a rectal tube and for the surgeon to guide it high up into the colon while the abdomen is open. In all resections of the large bowel we must provide adequately for the escape of gas, as emphasized by Ochsner at the last meeting of the American Medical Association.

The Delusion of Delay.—In the management of acute appendicitis the delusion of delay is now quite generally recognized even by the laity, and I simply wish to emphasize two points:

1. There is absolutely nothing in procrastination. The mortality increases in direct ratio to the number of days which elapse between the onset of the disease and the time of operation.

2. Cases with abscesses to the outer side of the ascending colon should have posterior as well as anterior drainage. As Coffey showed several years ago, as a patient lies on his back there is a pocket between the kidney and the ilium which averages 4 inches in depth, and if this is not drained by a posterior drainage we have a constant pool of pus there which certainly predisposes to an ascending infection either in the portal vein, the subdiaphragmatic or subhepatic space. A considerable percentage of these cases will die if one fails to put in a posterior drain.

Multiple Operations.—When it is necessary to perform three or four different operations on the same patient it is much safer, if the procedures require much over an hour, to do them at two operations rather than keep the patient under an anesthetic two or more hours. It is fairly safe to do plastic work on the cervix or vagina combined with an appendectomy, a salpingectomy, or oöphorectomy, but in my opinion it adds a great deal to the hazard to combine a pelvic operation with a drainage or removal of the gallbladder, because it not only prolongs the operation unduly, but we have the added risk of infection from the biliary tract which must always be considered septic in those cases which require surgical interference.

Importance of Reexamination Following Operation.—Many cases which have been operated successfully and should redound to the surgeon's credit are classed as failures and react to the surgeon's detriment, because he has failed to observe the patient subsequent to the operation. Some of these cases are neurotics who need psychotherapy and reeducation. Others have expected that an operation would remove them from the sphere where they would be subjected to the rhythm of life; of alternate periods of mental excitation and buoyancy and depression and even despair, which we all know is inevitable. Others have a recurrence of their old trouble—their operation has failed to relieve them. The surgeon who assumes the responsibility of operating on a case incurs the moral obligation to see that the patient is well. Indeed, it is to the interest of all concerned—the patient, the family physician and the surgeon—to see that the patient has been relieved, and if not relieved to know why. This branch of surgical work is now considered so important that in many of the medical schools, notably in Boston, student bodies are being organized for the purpose of following up surgical cases and tabulating results. Then each week the staff meets

and discusses the cases in the light of end results. Such a program for a county or city medical society would be of very great value, especially if the unsuccessful cases were reported and the causes for failure frankly and honestly discussed.

In conclusion, permit me to express the hope that we may study our failures in a spirit of optimism to the end that they may prove incentives to better work.

DISCUSSION ON THE PAPER OF DR. FLEMING

DR. CHARLES C. TERRY, South Bend: The essayist has discussed so many topics in his paper that it is impossible for any one in the short time allotted for discussion to take up all of the points. In the first place I will take up the early diagnosis of disease. It is not always the fault of the surgeon that an early diagnosis is not made. Doctors from out of town often bring a case to the surgeon and expect him to operate promptly, and many times he operates sooner than he should. Another thing that makes it difficult is that people will have to be educated along the line that it takes time to make a diagnosis. Some cases are so obscure that they require study and need to be kept under observation for two or three days, but when such a thing is suggested to patients they object. They think the diagnosis ought to be made early. A good many of the poor results we get are in cases that we term neurotics and neurasthenics who come for operation. The fact they are so termed intentionally is because they have been operated on for the wrong condition. It is an easy thing to make a mistake in diagnosis when there is trouble in the right side of the abdomen. It is so easy to make a diagnosis of acute appendicitis when the trouble may be due to a stone in the ureter on the right side, or to pulmonary conditions, and especially pneumonia in children where we have right-sided pain. I recall two or three cases that were brought to me for operation with a diagnosis of appendicitis which were beginning pneumonias in children. Until we take time to study our cases longer and be more thorough in our work, we must expect to have a high percentage of failures, many of which could be obviated if we took more time and devoted more attention and consideration to our cases.

In the female particularly one may make a diagnosis of appendicitis, but if the abdomen is explored carefully the cause of the pain can be located. The trouble may be due to twisted pedicle of an ovarian cyst. Mistakes of this kind are made by all doctors. One of the advantages of making a large incision is that you can thoroughly explore the abdomen before any particular operation is done.

As to the choice of anesthetics, I think it de-

pends a good deal on who gives the anesthetics. Ether ordinarily is the safest anesthetic. Nitrous oxid requires skill to give it, but it is an ideal anesthetic from many standpoints. The patient goes to sleep nicely, wakes up, is given a drink of water and is comfortable, but I do think it requires great skill in its administration.

The essayist is quite right in what he said about multiple operations. Where a major operation, like a hysterectomy, is done, and gall-bladder drainage is required, I do not think they should be done at the same time. It is too much of a shock to the patient, and there is great danger of infection. The Mayos have discontinued doing two major operations in the upper abdomen in cases of females, because the dangers are increased greatly.

What the essayist said about early operation in intestinal obstruction is timely. We all know the mortality in cases of obstruction is the same as that in appendicitis or any surgical condition; it is great when operation is deferred too long. Much depends on the time the operation is done. That is true and always will be true. It is better to open the abdomen of half a dozen patients early than to let one case go on for two or three days and die as a result of delay.

DR. H. H. MARTIN, Laporte: It has been stated, and we believe truthfully, that if progress in every field of endeavor should cease, it would require fifty years for the application of the knowledge now available. This is especially true concerning medicine. Our surgical mistakes are not due so much to the lack of knowledge as to the lack of proper application of knowledge now at our service.

Bloodgood in a recent discussion stated that "the surgical field is so large that no one man can possibly hope to thoroughly master even one of its many ramifications." The same is equally true in every other field of medicine. It is the lack of proper appreciation of these facts that is handicapping medicine more than anything else.

This is a very valuable paper, but as we analyze our profession we are depressed when we realize the little good that the paper will accomplish. Some years ago, while acting as secretary of our county medical society, we were interested in following the average attendance at the various county meetings in the state. We were surprised to learn that the average attendance at the Laporte County meetings was the largest of any county meetings, and with us a 50 per cent. attendance was never realized, less than 25 per cent. of our members were in regular attendance, and still for two years our meetings had a better average than any county meetings of our state.

The men privileged to listen to this valuable paper, together with the few who will read it as published, are not greatly in need of its inspiration. We believe the greatest problem in medi-

cine to be, how to reach that 75 per cent. of our profession who are so busy, or think themselves so, that they do not attend medical meetings. One solving this problem will do more in placing medicine on a par with other sciences than has ever been accomplished; it will succeed in relieving the surgeon of many perplexing problems, and will save a large number of cases that are now being classed as surgical failures.

Practically every death as a result of appendicitis has been a neglected case. This has been a known and appreciated fact for the last twenty years, yet the death rate of appendicitis stands as it did ten years ago. These same facts pertain to intestinal obstruction. As a rule, these cases have been under observation varying from a few days to several months, and reach the surgeon only after the case is desperate or hopeless. The responsibility for such conditions rests largely with our teaching institutions, many of which are still being commercially conducted.

Dr. Fleming has divided surgical failures into two general classifications—those of incorrect diagnosis, which embodies a lack of surgical judgment, and those of neurotic tendency.

If we will but admit our failures to ourselves, even if not bold enough to acknowledge them to others, we soon appreciate our own limitations, and are forced to an appreciation of the necessity for cooperative teamwork. In reviewing our earlier surgical experiences we recall a number of cases incorrectly diagnosed and unnecessarily operated. In fact, it was such experiences that forced a change in our professional relationship. We do not wish to be understood that we are now making no mistakes, for we are, but they are less frequent, and in a large measure are still occupying one of the two classifications as mentioned, thus proving the necessity of greater cooperation and greater efforts.

A subject not mentioned by the essayist, but bearing directly on the success or failure of surgical work is that of surgical technic. The success of certain surgical clinics is attributed largely to the selection and proper administration of a given anesthetic. But as we recall the machine-like cooperative efforts which eliminate any false movements alike in operator and assistant; the deftness and gentleness of handling tissues; the rapidity with which any given operation is completed; the careful scientific nursing of each and every case during convalescence, we are forced to conclude that technic plays a very important rôle in their success.

We believe that every operator should have his regular assisting staff, and that they should work together frequently enough to establish a technic that will be maintained and followed. We also feel that this has as great a bearing on the success or failure of the work undertaken

as the selection of a proper anesthetic, and we are not minimizing its importance.

We appreciate that it is the practice of many operators to have as their assistants the man referring the case. This man may refer but one or two cases in a year, and these are his only opportunities of becoming familiar with hospital technic or the technic of an assistant. Nevertheless, the surgeon on whom the responsibility rests for the success or failure of his work gladly and freely accepts him as an assistant, knowing full well the handicap he is placing on the patient, and does so for the sole reason that he thinks he is forced to because some other man in the same field stands ready not only to allow him to assist and collect an assistant's fee, but is willing to divide fifty fifty with him.

The records of every public hospital show a decided increase in the death rate at the time of changing interns. This condition will not improve materially until every hospital and every surgeon is compelled to keep accurate records and accurate statistics, and to publish them at definite stated intervals. The public will then have something definite on which to make their selections. We realize that this is approaching state medicine, and state medicine will be a reality before the passing of another generation.

In practicing surgery on the so-called neurotic, we are dealing with an unknown quantity. In the first place, the term as applied is much abused. It may mean anything from a moron to an epileptic. These cases should be studied and classified. Cases of dementia praecox, paranoia, mentally deficient, the syphilitic, and many others of certain classes will not be mentally improved by any given surgical procedure. The only safe guide in dealing surgically with this class is to operate for the removal of actual demonstrated existing pathology, and not to operate on symptoms. This is the only safe and rational procedure, and if followed, the so-called neurotic becomes the most interesting rather than the most dreaded class the surgeon meets. Many badly diagnosed cases of so-called neuroses fade away with the removal of a focal infection.

DR. GEORGE D. MARSHALL, Kokomo: I do not think doctors are at fault for not making accurate diagnoses in a certain class of cases. One statement was made that a physician probably refers one or two cases a year to a surgeon and expects to act as an assistant and get something for it. We have local men who refer cases to specialists constantly for operation. These patients get the benefit of laboratory research, and as a result the surgeons of such hospitals get many cases referred to them.

The question of teamwork should be emphasized. Patients do not receive the best of surgical attention when some general practitioner,

who has not time to attend any medical societies, local or state, is referring the major part of his surgical cases. That I believe is the case now. It is with us. Of course, the unvarnished facts sometimes are unpleasant things to hear, but that is the case with us. That a great many cases go to operation without even a microscopic examination of the urine I know to be a fact, and on that account the mortality is greatly increased.

I had an experience a short time ago with a man who was taken sick at 2 o'clock in the morning. He had rigidity in the right side of the abdomen, was vomiting, his bowels had moved, but the case looked as though it might be one of acute abdominal trouble. I gave him anodyne to relieve pain. Examination of the urine, which I secured by catheter, showed he was only passing 4 ounces of urine in twenty-four hours. The urine was loaded with tube casts, and he had all the signs of a degenerative kidney lesion which had been going on for some time no doubt. The man had uremia and died that day. There are many cases rushed to hospitals and operated. The question of operating is embarrassing to the man who refers a patient because a certain spirit of commercialism pervades the atmosphere, and that is a contributory factor. These things we should look square in the face, as they are important factors in the mortality rate in our hospitals.

DR. LEONARD F. SCHMAUSS, Alexandria: Dr. Fleming has given us a very good paper. He has brought out several interesting points, especially in the selection of an anesthetic. I want to take issue with him in regard to the causation of pneumonia. I have maintained for the last eighteen years and still maintain that pneumonia following operation is not necessarily the result of ether, but the result of other things. In an article I published in our state journal I spoke of circumstances which led up to the usually accepted fact that ether does cause pneumonia, but it has been clearly demonstrated since, over and over again, that pneumonias are also developed in connection with the use of chloroform anesthesia, and they also develop in connection with local anesthesia. The same applies to bronchopneumonia. It is stated as a general thing that where you have bronchitis or a tubercular condition of the lung, you should not use ether. That is contrary to my experience. I have found that an existing bronchitis or an existing tuberculosis is not aggravated by the administration of ether. We should consider again the fact that tuberculosis is prevalent. If we examine the patients we operate on, we will find a large percentage of them have tuberculosis, and in a large percentage of them their condition will not be aggravated by the administration of ether. On the contrary, I saw one case of chronic tuberculosis that was

distinctly benefited through the administration of ether. The same applies to prostatic cases. In these cases we are told we should not give them ether because it is apt to be injurious. I claim it is not the ether that is injurious, but the extensive hemorrhage associated with these cases.

In regard to diagnosis, it is claimed that cases of pneumonia are apt to be confounded with appendicitis, and vice versa. The fact is that you can have both conditions in the same patient, but an examination of the lung will certainly clear up the diagnosis.

There is a certain point that has not been cleared up in my mind, and that is, those of us who have operated on cases of intestinal obstruction will appreciate the difficulty or importance of emptying the intestinal tract. It is advocated to make multiple punctures of the gut. In protracted cases, where we have paresis of the intestine, multiple punctures work out poorly. You puncture over 10 or 15 inches of the gut or each individual loop. The same applies to enterostomy. You simply bring the intestine up in this way, but it will not empty itself if paresis has set in. Those are the cases we want to relieve and where difficulty comes in.

DR. STOLTZ: Empty the parietic intestine by means of a long tube.

DR. SCHMAUSS: I would like to ask Dr. Stoltz or Dr. Fleming how long the tube ought to be and the diameter of the tube, because these are extreme cases, and if the intestinal canal can be emptied by a long tube we ought to know it.

DR. CHARLES STOLTZ, South Bend: I have some positive notions on the question of intestinal obstruction and I air them whenever I can. I have not had 50 per cent. mortality in cases of intestinal obstruction. The principles that underly intestinal obstruction are its early recognition and thorough operation. Those are the points to be borne in mind. You cannot stop anywhere in a case of intestinal obstruction; you have got to finish the job. If the patient dies under your fingers, you have got to finish the job. If you have a case of intestinal obstruction with fourteen angulations of the gut or absolute closures, if you leave one of them, the patient will die.

Another thing: There has been more attention paid lately to the toxic contents of the intestine, as Dr. Fleming has endeavored to impress on you. I always empty the gut, as Keith recommends. Moynihan and Binnie say that a greatly distended gut is a paralyzed gut. In any abdominal operation it makes no difference whether it be intestinal obstruction or what not, if there is distention of the gut, I empty it and put it back.

I have adopted the use of the Monk's tube.

DR. SCHMAUSS: It is not on the market.

DR. STOLTZ: The Manhattan Surgical Instrument Company will furnish Monk's tube. Several years ago I got our laboratory man at South Bend to make me some. I left them with nurses and they broke some of them, and with what other doctors borrowed of me, I think I have but one such tube left. If it should break and I should have a case of intestinal obstruction to deal with, I would attack coil after coil. It is true, as Monk of Boston has shown, every coil of intestine is a unit. It is innervated as a unit, and it is supplied with blood as a unit, consequently each coil needs to be emptied. You can make multiple punctures of the gut; you can milk it down, but get the gut empty whatever you do. Monk's tube consists of a simple glass tube, very thin. You do not use much force in its introduction. I use the half-inch tube; that is, the outside diameter is half an inch. That is large enough for a child 5 years of age. Let the glass tubing be as thin as possible, but have the opening large. Monk uses 6 or 7 inches of tubing. I make them 15 inches. (Here Dr. Stoltz demonstrated the method of using a Monk's tube.)

DR. MAURICE I. ROSENTHAL, Fort Wayne: Just one word as to anesthesia in cases of intestinal obstruction. These patients are in an extreme condition, as a rule, when we get them. They are exceedingly toxic with fluid and the less damage you do to the individual, either as to lungs, circulation, emunctories or kidneys, the better. It is particularly in these cases where local anesthesia shines. Take a man with distended gut and you can use a solution of novocain, about 1 gram to 3 ounces, or 1 per cent. solution; you can use 3 ounces if necessary. I add to this about two or three drops of adrenalin, which has a tendency to raise blood pressure, which is an advantage except in old persons. You can do these operations just as nicely under local anesthesia as with ether or other general anesthetics.

I recall the case of a girl who had a gastro-enterostomy done. She was syphilitic. Six weeks after the gastro-enterostomy closed she had adhesions. We reopened her, loosened up the adhesions of the gastro-enterostomy; she got along nicely for two weeks, when it closed up again, and it became necessary to relieve the woman or she would die of starvation and anemia. We put her on the table and operated under local anesthesia. We put clamps on the stomach, brought up the bowel, and did the long anterior loop operation of Kocher without further anesthesia. We thought she would have sufficient shock to have negated our efforts, but the anesthesia was satisfactory.

I have done a number of major operations under local anesthesia. The man who gives anesthetics for me has been giving them for

ten years. My experience has been largely with ether. We use gas as a preanesthetic, and these patients get one-third less ether. They get morphin and hyoscin half an hour before operation and are put to sleep with gas, and ether is given straight and not with gas. This man I consider an expert in giving anesthetics; yet there is something lacking in gas anesthesia in abdominal work, in that we do not get the relaxation that we get with ether. There is an advantage in the use of gas, in that you use less ether subsequently, and we have been satisfied with that mixed form of anesthesia.

DR. MILES F. PORTER, Fort Wayne: This paper of Dr. Fleming opens up such a large field that were it to be discussed in detail we would still be here when the time came to call the next meeting of the Indiana State Medical Association. It is a most excellent and timely paper, but rather than speak of the specific items in detail in the paper, I want to call your attention to a few points which will illustrate what I take to be the main factor in explanation of our own terrible results in the practice of medicine.

As to the question of anesthesia, if you start to study and make observations, you will be forced to the conclusion that part of the work that is being done, part of the papers that are being written, are being written for what purpose? To draw attention to the institution or the individual from which the work comes.

As to the question of assistants. Why is an incompetent assistant asked to take part in an operation? Because of the fear of the surgeon that he will lose some prestige if the incompetent assistant is not called in. Why is it that these cases are not studied as long as they should be? You say it is because people will not permit it. No, that is not the prime cause. It is because we are afraid if we insist on doing it some other doctor will get the job. Here is the point: it is ignorance that is holding us back. That is true, but we can get rid of that, and we are getting rid of it, but the milk in the cocoanut is commercialism. That is the greatest handicap to surgical progress today when we come right down to brass tacks. Therefore, I was particularly glad to hear Dr. Marshall say that he believes that state medicine is coming. It should come, gentlemen. I confess, that when I think of everything that I enjoy in the way of prosperity in this world is gotten at the expense of some other fellow's suffering, it does not make me feel good, and I welcome the day when there will not be a mother's son working on the individual on whom we are working. (Applause.)

DR. CHARLES M. MIX, Muncie: I congratulate Dr. Fleming on reading one of the best papers that I have ever heard before the Indiana State Medical Association. I am not going to discuss the paper because the time is too short.

I want to make one remark apropos of what has been said by Dr. Porter. It reminds me somewhat of the burden that comes on a man and the attitude he assumes after 50. He is much more virtuous after 50 than when he was 20; and likewise, when a man reaches the point that he does not feel the pinch of necessity that others feel, he can talk with more enthusiasm.

DR. MILES F. PORTER, Fort Wayne: That is exactly what I complain of. Dr. Mix, nor any other man in this room, has not known what it was to be poor nor to work hard, as contrasted with many men who are 50. I want to say to you that is one of the worst excuses ever offered by a man for commercialism. There is no excuse, gentlemen, for any man not keeping clean because he happens to be poor. I want to say to you that the men who have stood for decent surgery and decent medicine, not only in the state of Indiana, but throughout the country, have tasted poverty as much as any of those men who are indulging in these nefarious practices. We want to be men and do not want to make any excuse of that kind, and that is the reason why I want state medicine to come.

DR. FLEMING (closing the discussion): It is already 1 o'clock, and I think most of the important points have been brought out, and I think you will appreciate the paper more if I simply thank you for the generous discussion and for the many complimentary things you have said about it.

THE EVOLUTION OF A SPLINT FOR THE FEMUR*

GEORGE F. BEASLEY, M.D.
LAFAYETTE, IND.

The bete noire of all who have to do with broken bones are those fractures involving the femur. Do the best we may, so many cases of fractures are left faulty. If the fault is in the upper portion it is not so conspicuous, and the owner, being averse to showing his shortcomings, will keep it under cover and it may be overlooked, but if in the lower portion of the femur the telltale limp advertises you to the critical public and the criticism brings no pleasure to your troubled soul. While there has been advance in the repair of other parts of the body, there has been but little advance in the care of fractures of the femur. The self constituted authorities seem to be content to follow in the grooves laid down by the forefathers. The medical journals are filled

with descriptions of various operations for holding the fractured femur in place, but one simple method is not mentioned.

One of the first things I learned away back in the early sixties, from that prince of surgeons Dan'l Brainard, was to make fracture cases comfortable; that any appliance that was irksome or annoying would not produce as good results as one that was comfortable, and to always place the limb in a position that would relax the muscles. All seem to have forgotten the upward and outward tilt of the upper fragment and the backward drop of the lower, and sought to pull the ends together with that relic of the Spanish Inquisition, Buck's splints. How the poor wretches suffered with the weight swung to the foot. They were encouraged to make the best of their troubles. That they were so patient, I now wonder. If the results had been in comparison to their sufferings, there would have been some compensation. But how often the knee was left stiffened for so long, the muscles atrophied and useless, to say nothing of the shortening. I was one of those who thought I was doing right in the way I tortured the unfortunate, but, like Saul of Tarsus, the scales fell from my eyes and I saw wherein I had sinned. While my patients seemed to think I had done the best for them, I was cognizant of the fact that I was lacking in something and should do better for those who came under my care.

Many years ago, while talking with the late Dr. Alex. Mullen of Michigan City, I was giving my troubles. He said, "Did you every try swinging the limb up in hammock-like support?" He gave me a description of a splint he had made and the results he had obtained. A short time previous, a doctor had stranded in my town. He "touched" me for a "V." He was introducing a splint he had devised for fractures of the femur. It was made with a hinge in the middle for the flexion; at the upper end there was a perineal band, at the lower a device for extension by means of a screw; to this was attached a moccasin for the foot. This splint he left as an earnest of his intentions, promising to remit when he got home. That was the last I heard of him.

A brakeman going up the side of a caboose, missed his footing, fell, and the wheels of the truck did the rest. It produced a compound fracture of his femur, while the leg was so burned by the friction that there was no place to apply adhesive for extension. I thought of the splint that had been left me as a legacy, hunted it up and put it on. The thing worked

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

fairly well, but the patient would not stand the discomfort produced by the perineal band and had it loosened. Reapplying brought the same result. I put it on again and again, but in spite of my endeavors and warning he would not permit it to remain; said he would rather be left a cripple than endure the torture.

I found that when I laid the leg on pillows in a flexed position I could get the limb in proper position and length, but any movement disarranged the fracture. I then thought of Mullen and his hammock, and I had a frame

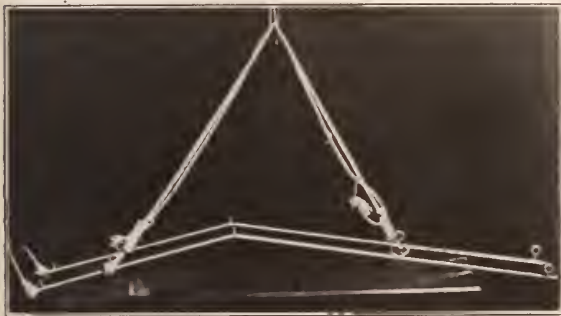


Fig. 1.—The Beasley Splint.

made out of heavy wire at the wire works, and at the foot a plate to which I attached the moccasin. When the leg was placed in position and swung up, the patient was comfortable; then raising the foot of the bed there was enough traction to keep the limb in proper length. The patient recovered with less than one-half inch shortening. My apparatus was rather crude, and I invested in a Hodgen splint. This seemed ideal and I got good results, but every one to whom I loaned it made a botch of its application and cursed the splint instead of themselves for their results. One trouble with the Hodgen is that the supporting bandages tend to slip, and in this way the supporting rings would occasionally break and let the leg drop, which, to say the least, was annoying to the patient.

In the *International Journal of Surgery* of June, 1912, Dr. Frank A. Carmichael of Goodland, later Ottawa, Kansas, gave his experience in the treatment of fractures of the thigh with a modification of the Hodgen as suggested by Dr. Geo. S. Brown of Birmingham, Ala. Instead of supporting the limb on the bandages fastened from side to side, he used a piece of muslin the length of the limb. This was fastened firm at the ends, then fastened with safety pins along the side. The outside edge was torn down about one third, this to permit better handling and adjustment. To the ends of the

supporting cords he fastened small tent blocks, these permitted the easy changing of the axis of the limb without the trouble of untying and retying them, as we had to do with the Hodgen. At the attachment for the suspending cord he put a spring balance and hooked the cords over it. The balance shows the amount of pull you have on the limb, and, again, the elasticity permits the movement of the body without any jar to the limb. You know the agony that is caused when you run your weight above 10 pounds in the Buck's; with this, you can run it up to 25 pounds with no discomfort. These improvements have been so satisfactory that I have used this splint ever since.

In one of the volumes of the *International Clinics* there appeared a description of a splint in which the author claimed the same improvement as suggested by Brown. He may be sincere, yet the description and cuts were so like those of Dr. Brown that I was reminded of the editor of a country weekly who published lurid editorials, to the satisfaction of his subscribers, until some skeptic traced the editorials to a metropolitan paper. Hence, in this short paper I want to place the honor where it belongs, so that the men who have shown us how to make the weary hours pass less painfully and tedi-

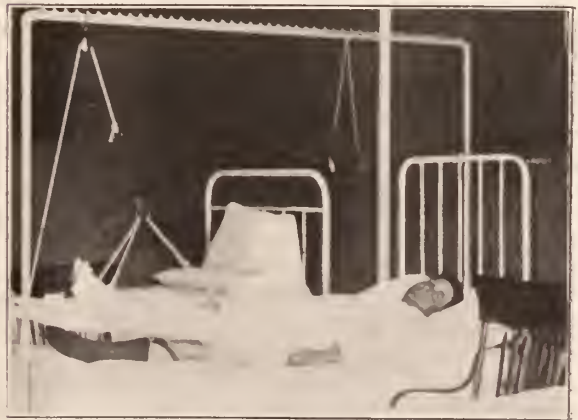


Fig. 2.—The Beasley Splint in Use.

ously to our patients, shall have the honor. It belongs to Dr. John Hodgen, who gave the first solution as to the proper way to treat fractures of the femur, and to Dr. Geo. S. Brown, who made the improvements.

Suspension is the only way to treat fractures of the femur, if you want to get results that you are not ashamed to meet on the streets in daylight. But in using it, there must be some grey matter in the cranium of the surgeon. So many fail in the application of this simple ap-

paratus. It can be made by anyone who can handle a pair of pliers and soldering iron, or adhesive plaster. A piece of No. 9 wire, long enough to extend from an inch above the perineum down 4 inches below the foot, then right-angle 4 inches, then back the length of the first. The upper end can be turned, forming a ring to insert a spreader, a curved piece, to hold the upper ends apart. This is used in both the Hodgen and Brown splint. Dr. Carmichael has omitted this and thinks the splint worked better.

My experience shows that he is right in the majority of cases, yet there are some cases where you will find it is a help, so put in a place for it so that it will be there if needed. At the knee, bend to an angle of about 10 degrees, and one inch above the middle of the upper half fasten a ring on both side pieces and 1 inch below the center. Below, at the lower angle, fasten two rings; these must be fastened firm. Dr. Brown's improvement was the fastening of the muslin hammock to the rings at the sides. I have added at the ends and the middle a short spike, and this addition makes it firmer.

The muslin I prefer is medium weight, 18 to 24 inches wide, overlap on the inside 3 inches gives you plenty of room to fasten. Then about every 6 inches tear down one third, this makes it more convenient in fastening on the outside. There should be a support next the limb on top of the muslin; for this, you can use one of those perforated thigh splints, or binder boards, but what I prefer is one from wire netting and covered with a pad composed of sheet wadding covered with gauze. This should be quilted through and through, so as to be firm, and it should overlap at the ends and sides. It should be long enough to extend from the gluteal fold down to within an inch of the condyles, and wide enough to go half way around the limb. It does not matter whether you place it on the front or not, if the femur does not come down right under the pull, a similar splint can be placed on the front, and by passing portions of the bandage around you can bring it down.

TO APPLY THE SPLINT

First get the bed ready. With the multiplicity of hospitals and graduated interns, the preparation of a bed, like the application of plaster of Paris, is a lost art, and many patients suffer as the result. The best is a three-quarter bed. Thus you can work from either side, for you want to place the bed away from the wall. A firm mattress, laid on boards on top of the springs. Don't, as you hope for a good seat from St. Peter, lay the mattress directly on the

springs, yet 90 per cent. do it, and then wonder why the patients have bed sores. I am not partial to a rubber sheet over the mattress, for I think they have a tendency to make the patient's back hot and produce more or less irritation.

The bed fixed, then take two pieces of studding, 2 by 4, and at least 8 feet long. At the top cut a notch 4 inches deep, 2 inches wide; at the bottom nail a board 12 inches square and 2 inches thick. This makes a firm base. Over the bed place a board 2 inches thick, 6 inches wide, long enough to extend from one upright to the other, at the ends bore some holes, through which place pins that will hold it in place. Along the upper edge drive some wire nails down to within an inch of the head. Place the support at the side where the broken limb will lie.

After you have the bed fixed, then get ready to fix the patient. Lay him on the bed so you won't have to handle him more than is necessary. Then find the point of fracture; if you have access to an Roentgen ray you can have an exposure, but sometimes you are where they are not; so if you have to depend on them to ascertain whether or where the fracture is located. God pity your patient. Fingers were made long before Roentgen-ray machines, and if properly educated will tell you where the trouble lies. After the patient is laid on the bed, expose both limbs and note the difference. Then go over the sound limb carefully, then the injured. Do not try for crepitation; if you cannot determine without, you are not fit to handle broken limbs. After going over the injured limb, then go over both at the same time; in this way you can, if careful, ascertain the fractured point with but little discomfort to the patient.

Now ascertain the position of the limb and the direction of the force that produced the fracture; you are now ready to reduce the fracture. Use an anesthetic. Get a physician to give it, if possible; but if a physician is not obtainable, then pick out an intelligent layman and have him give it under your guidance. Taking them as they run, I don't know that they are not as good, if not better, than the average physician you pick up.

Flex the leg on the thigh to relax the heavy muscles, then bring the femur to the angle it was when it received the blow, and do it gently. Then making traction, while some one holds the pelvis firm, you unlock the fracture, and bring the leg around straight, where it should be held. See if the length is right. If the leg is short, repeat the maneuver. If you are careful you will not damage the internal structures.

All manipulations should be gentle. Don't attempt to pull the limb in place by main strength; it may impress the bystanders, but it is bad for the patient. Note the position the sound limb takes when at rest, then place the injured one the same. It may not look right at that time, but when well you will see that the patient walks better than if you attempted to improve on nature.

The splint must be placed right, and it is easy to do it. Three assistants are all that are needed, and a good layman is much better than the average doctor. The limb should be shaved, washed clean, then bathed with alcohol and water, equal parts. This combination of alcohol and water leaves the skin in a better condition than when you use alcohol full strength. Then apply the adhesive plaster, at least 2 inches wide. This extends from the point of fracture down to just below the foot. The lower end is looped back and fastened to a strip of muslin a foot long. Authorities say, "bandage from the foot up the whole length of the limb," but I have found it better to hold the long adhesive with strips that partially encircle the limb. The bandage is loose the second day, and with the open method you have the limb before you for inspection, permitting massage, which shortens the convalescence.

When the adhesive is on, *you, yourself*, should make traction until the limb is in proper position, then support it on pillows, and have it held by an assistant while you place the splint. When applying the splint have the cord for extension at right angles to the limb. This will enable you to get the splint in better position.

Hook the cords over the hook and have the adjustment so that the frame will clear the limb. Draw the muslin under the limb and fasten on the outer side. Be careful to have the upper end snug. While the limb is held firm you press it up against the gluteal fold. Have the third assistant pass the muslin strips through the rings at the end and tie them tight, then hoist the limb until clear of the bed. Now finish your adjustments, tightening at places, loosening at others; change sides by means of the tent blocks, then move the pulley over which the cord passes that holds the limb, so the angle to the limb will be about 45 degrees; raise the foot of the bed 6 inches and let the patient rest in peace.

Every one has his own ideas about the suspension. Hodgen and the balance say the limb should be swung from the ceiling. I have found this is not necessary. All that you want is the angle. This can be accomplished by a frame

above the bed, giving 6 feet clear. I have attached to the beds in the railroad ward in St. Elizabeth Hospital frames made from gas pipe that can be shifted from side to side. In addition, there are hand-bars fastened to the support over the bed, so the patient can shift himself as needed for comfort. I have changed the wooden tent blocks to some made of metal, and in addition have added a snap to fasten in the rings. The latter are not necessary, but they add to convenience.

I have used this method of treating fracture of the femur for many years, and when I have had the patient at the beginning and attended him to the end, I have not had shortening. I use the method in all fractures of the femur, from the neck down to the condyles. In fractures involving the hip I have splints made with the outside arm about 3 inches longer than the inner. Then when applying the hammock, put a strip bias so as to catch and hold the upper end snugly. The under-splint I make with an angle that can be moulded around the upper end, and it holds everything in place. Why is this position the best? When you lie on your back to rest, you involuntarily flex the thigh, to relax the muscles. If you can lay the leg on something that will clear a few inches, you rest better. The limb being exposed the whole length permits inspection; measurements to see that there is no shortening. There being almost no constriction, the circulation goes on, and when the bone is firm the muscles are ready to take up their work. This splint is useful in all troubles of the lower extremities.

You all will remember the agony your patient had with puerperal phlebitis, suffering with the dead heavy weight of the limb, and how she would lie hour after hour dreading to move on account of the agony it produced. In such a case the limb swung up in this splint favors the return circulation, and she can move about the bed and attend to the calls of nature with but little discomfort. The young lad suffering from hip joint disease, if placed in this splint while in bed, is much more comfortable than in any of the numberless contraptions that have been devised for his torture, only to prove wanting at the crucial test.

In compound fractures of the leg you can keep your extension and treat the wound at the same time by using this splint. The indolent ulcer of the old, with the unstable venous system is best treated by placing the limb in this splint which aids in promoting drainage of the limb, and the ulcer will heal while the patient

is permitted to move about the bed, and his vitality is not impaired.

Many years ago, while using the Buck system of extension, I thought that if you did not get the limb the proper length inside of forty hours, you never got it. Since I have used this method I have changed my opinion. A woman, aged 78, fell and fractured her left thigh about the middle. She was thin, could have posed as the living skeleton. There was called in her family physician, but as he did not take readily to broken bones he called for a surgeon, one of the elect. To belong to the elect, one must string a title to the end of his name. He called in two more of the elect, and, not certain as to the condition, the patient was anesthetized and an Roentgen-ray plate made before they could decide whether or not the femur was fractured. This decided, the patient was put to bed, and strapped to that instrument of torture, Buck's splint. After several days of torture, measurements showed 4 inches shortening. Again the patient was Roentgen-rayed, and the shadow showed shortening of the limb. Then by main strength the limb was pulled down, without the aid of an anesthetic, and a plaster cast applied. The plaster cast was left on until slough formed on the foot and ankle. Already a slough had formed on the buttocks. Finally, the cast was taken off and a patent tin splint put on. Later she was sent home to die, the attendant refusing to have anything further to do with the case. At this juncture I was called in. I had seen pitiable cases that had been treated by those who do not know, but this was the worst I ever saw. The limb was $4\frac{1}{2}$ inches short and wasted; skin dry and feeling like leather; a slough on the top of the foot and a bed sore extending across both buttocks, down almost to the bone. She was septic, and I didn't think she would last but a little time; but I have never turned my back on a suffering person, so I took charge. I took the limb out of the beautiful tin splint, and after giving it a good bath, followed by a thorough massage, I swung the limb up with the foot of the bed elevated. The scale registered a pull of 25 pounds, and she said, "It feels so good." The next morning to my surprise she looked like another person. She said, "This is the first night I have rested without some opiate." She went on to recovery. What surprised me was that the steady pull brought the limb down, and when she finally got out of bed there was no shortening.

In conclusion, permit me to say that when you have a case of fractured femur treat it

yourself and do not trust to the average intern, for from my observation they have little use for fractures. See your case daily until the bone is firm. Note the appearance of the limb. If there is a tendency to shortening, then increase the angle of the traction cord. When the bone gets firm, shorten the angle. This latter is done by bringing the pulley back until it is at right angles, and while you are doing it lower the foot of the bed. In the aged this permits them to change their position, can rise almost to a sitting position, and you avoid the congestion of the lungs and the pneumonia that so often follows when tied up to the Buck's and compelled to lie flat.

The back and hips can be bathed and aired readily, and bed sores are wanting. For a lotion in these cases I am partial to equal parts of alcohol and distilled water, and as much powdered alum as it will dissolve. Do not try to attend the case in partnership and expect to get the best results. Be the boss or step out. To those who are wedded to Buck's and are satisfied with $1\frac{1}{2}$ inches shortening, change your ways or get out of the way and let some one in who can give proper relief. If you will use this splint, and use it properly, your patients will call you blessed instead of otherwise.

DISCUSSION

DR. CHARLES STOLTZ, South Bend: The reduction and management of fractures, as Hopkins has well said, seem to be matters very largely of intuition, not opposed to education by some, but denied to others in spite of it.

The trouble about a fracture is that a patient thinks he has only a fracture, and that the whole treatment consists of reducing it. If you go into a hospital where fractures are treated you will find that they adopt a certain system of treating fractures, the same as they follow a certain plan in the treatment of typhoid fever, giving the typhoid fever patient, for instance, a quart of milk a day, and he has to take it.

In treating fractures a certain definite plan should be pursued. I never have bought a fracture apparatus for fear I might become educated to the use of the splint. I do not know why, but I have had a great many cases of fracture of the femur and with me each case is a law unto itself. Sometimes, in the case of little fellows, I attach a pulley to the ceiling and suspend them from the knee. In other cases I have used Liston's splint, and I have treated fractures with sandbags. My results in cases of fracture of the femur have been satisfactory.

With reference to traction, I never have used adhesives. That is one thing I have not been

guilty of. I can secure traction upon the thigh without adhesives. Adhesives are irksome and unsatisfactory in my hands. I have fixed up a leather device to go over the foot, and various other things, and have managed to get enough traction in that way. In connection with traction you pull down the leg to see whether it matches the other. One leg may have been an inch shorter than the other leg in the first place, and you think in pulling it down you got it down to where it belonged and then you quit. You put on a 15-pound weight and think you have done all that is necessary to prevent shortening.

Very recently I saw Dr. Cubbins of Chicago bring about traction by driving a nail one-eighth of an inch in diameter through the os calcis. Under cocain, novocain, or some local anesthetic, the operation consisted in making a puncture with a small knife on either side of the os calcis and driving this nail right through, putting a cork on the end, and you have an excellent device for producing traction. There is no difficulty offered by it at all.

The essayist referred to making a fracture bed and rendering the patient comfortable. That is the keynote to fracture treatment. When a fracture has been well reduced and seems comfortable, that is a pretty good rule to follow. You cannot make a fracture patient comfortable unless the fracture has been thoroughly reduced and the limb placed in a comfortable position, and that is half of the battle. A fracture of the femur or a fracture of any bone must be put in a comfortable position to relieve strain on the muscles and make the whole thing simple. You do not need to use many retaining devices.

Just what use massage has in the active stage of a fracture of the femur toward healing, I do not know. I should say the value of massage, in any stage of fracture treatment, depends very largely on conditions that exist. If you have a limb to deal with in which the effects of the trauma have subsided, and there is no inflammatory condition, massage may hasten the healing process to some extent, but the presence of an inflammatory condition tends to prolong the patient's discomfort and retard the healing process rather than hasten it. Where an inflammatory process is entirely absent and there is nothing left but muscular ankylosis, massage will help. You need not fear ankylosis of any kind when there is no damage done to the bone away from the seat of fracture.

One of the things I have used a great deal in fracture treatment is plaster of Paris, but I do not use it any more. The late Dr. Murphy said that we had more cases of delayed union from the use of plaster of Paris than

from any other cause. The slight mobility at the site of the fracture is going to hasten the healing rather than retard it.

DR. H. R. ALLEN, Indianapolis: Before discussing this paper I want to compliment the essayist, who has presented the best fracture paper I have ever heard read in Indiana. It is good from many angles.

In the early part of September Dr. Whitaker was riding in a new Packard when it turned over on him and had to be lifted off. His left femur was broken, his spine was injured, and a nice piece of bone gouged out of his right leg. The accident was due to making a 15 mile curve at thirty miles an hour. He noticed in *THE JOURNAL* Dr. Beasley's abstract. It interested him. He sent these photographs down to show results in his case. I will not present them as they are not absolutely perfect, but there is no angularity in his case.

The fracture work of the past we must forget. We have to come to the future for good fracture work. This talk about a good functional result, with the horrible Roentgen-ray accompaniments, people will not stand for. They can have perfect work. The work I have seen done encourages me to go on and get better results through improved technic, and to forget the traditions handed down in the days of Columbus.

I wish the doctor had spent a little more time in describing one of the first steps on the unlocking of the thigh previous to any attempt to set it. So that you will all know what I mean and will always remember it, you have tried to straighten the leg by straightening the knee; if you feel the hamstring tendons you will find they are tight. Flex the knee and the thigh is unlocked. Your fracture can be reduced readily. If you will try that on your leg, do not contract the muscles, feel the hamstrings, and you will find it is locked.

The usual method of reducing fractures is strong traction with the knee in extension. Remember, your thigh is locked; your long muscle groups are tense, not in all cases, because in some cases they are used enough to permit the jagged projections of bone and retaining notches to pull far enough apart to butt up evenly. You unlock your thigh by bending the knee, then place your bone easily.

Concerning methods and the only method, this fracture of Dr. Whitaker's was reduced 55 miles from Indianapolis. I went down in an ambulance. I reduced the fracture, hauled the doctor home, put on a brace, and the next day photographed him. It shows that if you resort to advanced methods and not constant force you can hold your fractures. Every mechanical device you have will maintain

constant force. Use your constant force for fixation purposes.

Concerning pain, if a patient has pain, do not give him a hypodermic, but use your gray matter and find out the cause of pain. It is the doctor's fault if the patient is uncomfortable. Bones are without nerves. The thing that hurts is the displacement. You can jab a bone in muscle tissue and produce pain, but if the bones are held at a normal distance constantly there will be no pain.

In regard to the past, it must be remembered that before Columbus came over here, and away back of his time, the basic mechanical principles of bone setting were devised and even handed down to us by tradition. Doctors are the only race of preachers who know you can maintain bones at a distance with constant force. There is no dynamic or physiologic laboratory that will fully take care of it. But doctors know it does not do it. These basic mechanical principles, dating back before the discovery of America, are just as good and just as sound and unalterable today as they were then. Understand, I am not criticising these basic mechanical principles; I am criticising our selection and maintenance of them. We are at fault. I know of nothing so hopeless of doing good bone work as adhering to these principles. They are contradictory. We demand of nature's laws things that these laws are incapable of fulfilling. We must shift and get on to the modern application of nature's laws and basic mechanical principles, and then our fracture work will be simplified.

There are many ways of securing fixation forces for fixation purposes. You have the Lane plates. You have these pins which require very much less cutting. There are cases in which you have to use them. I do not recommend these pins going through arms and legs. You punch them with a soldering iron and they will stay in perfect position, and you put lugs on the other end. You apply warm water and metal handles. It dissolves and you pull them out. There are occasions where they are to be used. It is a variable condition.

I have a man in the hospital now with an ordinary fracture of the femur, one in which I would not ordinarily use pins. I had to use them because since he has been out of the hospital he has been on three good and substantial jags, and when he gets those jags he yells so loud that the hospital officials are inclined to put me and him both out. He is a good automobile racer; therefore I pinned his bones together.

If we can remember, first, to realize the error we have been laboring under; if we will take mechanical principles and submit them to a board of mechanical engineers, that quick (snapping the finger), they will listen to us,

but we have not reached that point because of our good friend luck. If you place the broken fragments of bone in position and do not use a good retaining device you cannot maintain them in position, they will slip and in spite of what is done you will get a fairly good result. You can get length, but what are you going to do if you have a pulverized femur? Then your methods will not enable you to hold the bones in position.

The gentleman who led the discussion said he had never fallen to the use of adhesive plaster. He prefers pins. I am glad he mentioned this because it brings out one point. He shows that you can put pins through bone and they do no harm. That is the theory I have. With these gimlets you have through and through drainage, and silver is one of the best tolerated in the human body, and I do not have trouble with these gimlets.

The leader of the discussion said that each case was a law unto itself. Well, we are all running automobiles and all getting into mechanical work, and each case is a case unto itself, but there are ten good ways for meeting each one of these cases, each location up and down the femur. You can take your choice of ten good ways to treat fractures of the femur.

The essayist has made a very good departure, and the leader of the discussion has found that plaster of Paris is not essential.

Concerning the old weight and pulley, I know of nothing that has done more harm and retarded fracture progress than plaster of Paris.

In regard to the one point brought out of providing comfort for the patients who have tuberculosis of the hip joint, you do provide comfort by following Dr. Beasley's method, but you also provide angular deformity, and after all, you have had to go in and correct a part of this angular deformity as other men have done. They have to make these patients comfortable by keeping them in a straight line. That can be done.

I use adhesive plaster strips for traction purposes. They go just above the knee and make traction down, and one method I use is to allow the patient to lie down on the adhesive and put it between the thumb and fingers, making traction. If a patient has pain, it is your fault. You have to watch the nurse and the nurse has not watched the patient.

Concerning the bad end results, where you have deformities and shortening, these are tedious cases to deal with because there may be shortening independent of deformity. There is a group of men in my city who have made up what we call a cripples' relief fund for the purpose of working out deformities the results

of fractures and regular orthopedic deformities. Since Indiana has no orthopedic hospital, they have tried the scheme of paying expenses of braces in the hospital for those cases that are strictly charity cases.

DR. GEORGE D. MARSHALL, Kokomo: No weight will stop pulling until it rests on something to stop it from pulling. To arrange a pulley to get the right amount of traction would be a delicate operation. I would not attempt it in any other mechanical measure whatever. In getting traction there is often very little use for adhesive as a tractor. If you want to get traction on the femur you flex the leg and the knee and you get all the traction that you want. You do not have to pull on the skin to get traction, but simply flex the leg; it cannot get away unless it straightens out.

As to the idea of putting a pin through the os calcis and making traction on it, I should be fearful it would slip as we so often see in the ears of women after wearing rings. When you put metal or any other foreign body through the tissue and put on traction you will get absorption of the head of that pin which will cause it to slip. That is seen in the uncivilized races where they ornament themselves by placing rings in their ears and mutilating their lips, and so on. We find the same thing with Lane plates or anything. Where you use any metal or pin you will get necrosis. It does not stay tight. It gets loose.

There has been a great deal of talk at this meeting about these different splints, their application, and so on, but very little has been said about how to make them. That is one essential we should take up. If a man is not enough of a mechanic to make one of them, he should not use them. They are not hard to make. Any one should be able to make them if he has the mechanical skill to treat fractures. I have preferably used steel, commonly known as cold steel, which you can get in the different sizes, but it does not take a large size to support a limb, one eighth of an inch in thickness, and thirty-eight and one half inches in length. It is easily bent. You can bend it cold. It is easy to drill. You can go to the stove works and get them. They used to put them on the edges of stoves. The material is smooth and you can make spreaders out of them. By spreader I mean the steel bent in this manner (indicating), and then it is fastened into the splint in this way (indicating). You can drill a hole instead of providing a rivet, and you have a strong supporting splint. By putting adhesive plaster across one of the bars to the other you can form a trough; you can get any amount of extension you want. I have taken three eighths of an inch rod and bent it in. In a compound fracture of the femur you can bend the rod

in this way (indicating), and make it at right angles with the bottom of the foot and bring it up and make the angle; you can make a round ring; you can support this by adhesive underneath, and you get the whole weight of the patient for traction. These things have to be governed a little by the surgeon's ability to make them, but they are simple and easy.

I do not use plaster of Paris at all. Suppose we have a Pott's fracture of one bone and want something to retain it. Where we have one splint we can use plaster of Paris and it can be done very much easier with an iron splint made with wire.

I have a case now of a little boy who was struck by a motorcycle, fracturing both bones of the leg. I took a piece of steel splint, with a bar on each side and angle there (indicating); I have a piece ten inches long, riveted on the bottom. I can swing the adhesive under here (indicating), and then with a piece of adhesive and bandage over the toe I can pull as much as I want to. When I get it down straight I stop. There is no weight pulling on it at all. I can take that boy's leg by the heel, raise it up and swing it around, and he does not get any pain.

DR. JOHN H. OLIVER, Indianapolis: On behalf of Dr. Steinman, the distinguished German who devised this method of transfixing the pins, he never intended that there should be transfixing of the os calcis in fractures of the femur, that is for traction on the leg and traction where there is trouble at the joint. The doctor transfixes at the femur. I simply make that explanation on behalf of this distinguished surgeon.

DR. STOLTZ: In fractures of the leg he uses the condyle as a base for the pull.

DR. LEONARD F. SCHMAUSS, Alexandria: My original experience in the treatment of fractures dates back to the time I was intern at the Cook County Hospital, where we had a good many cases of fracture, and we used the Hodgen splints in cases of children, more on account of their cleanliness and the ease in attending to them in cases of bowel movements, and so forth. We used a Liston splint in cases of fractures in adults. Why the Hodgen splint is not used in adults, I do not know; but the results from the use of the Liston splint are still satisfactory. It is a splint which is easily applied. It makes the patient comfortable. It allows the patient to turn over on his side and to rise up, and the results of its use in the majority of cases are very satisfactory.

One of the first things I noticed in connection with these cases was a subluxation or a marked stiffness which was left after the splint was taken off and the patient put on his feet. Rea-

soning as to the cause of this subluxation and stiffness of the knee joint. I concluded it was due to the way in which Buck's extension is usually applied. However, I do not want to convey the impression that Buck's extension is no good; it is all right if properly applied. In the way it is usually applied the adhesive strips go above the knee joint, and are applied snugly around the limb as far as the ankle, and then a bandage is put around the adhesives to keep them in place, and when extension is put on, the principal pull is not on the femur or thigh but on the knee joint, and this causes a protrusion of the calf and ankle. The principle of Buck's extension is that the principal pull is from above the knee joint, not from below, and we have no trouble with subluxation of the knee joint or any particular stiffness. I have not had any trouble with my cases since paying attention to that point.

Another point is that Buck's extension is applied too heavily. The weights are usually too large and the extension is applied too long.

In regard to the use of the Liston splint, I never saw a case of bed-sores or pneumonia following its application in old people. Of course, pneumonia is said to be a bugbear in people advanced in years, but I never saw a case of pneumonia in an old person even in the recumbent position.

In regard to the degree of extension—Steinmann's extension—I saw a paper which was read by him at the International Congress, with illustrations and stereopticon views, and his intention is not to use this nail extension in connection with noncomplicated fractures, but the object of this procedure is to use them where you have trouble with the skin, where you cannot apply any extension, where you cannot apply a bandage or adhesive strips, but where there is fascia close to the injury, I do not think any of us would feel like puncturing the os calcis or condyles of the femur when extension can be put on with adhesive strips or a bandage.

The point which Dr. Marshall mentioned of putting these nails through the condyles is well taken. If we pull on the skin we leave a deformity, but that can be overcome by pulling the skin down beforehand, not pulling it up, and in that way avoiding traction on the skin. By pulling the skin beforehand beyond the point of puncture there will not be any pull afterwards.

It is easy to get up here and to claim a good many things for this and that method, but in active practice some of them may not be applicable. One of the worst failures I ever saw was in a case of fracture of the femur in the middle of the thigh treated by an orthopedic surgeon with all these different splints and apparatus.

In regard to the use of plaster of Paris, many

times cases will present themselves where it is a handy thing to use. Not every practitioner can make a splint out of wire, or go to a blacksmith, and even then they will not fit every case. It is unnecessary to use it in connection with fractures of the femur or a Pott's fracture of the leg. It is a handy thing to put on plaster of Paris after the swelling has subsided. You can put on a plaster of Paris cast and let the patient go. He is comfortable and there will be no trouble afterwards. In the average case in a laboring man, a man without means, plaster of Paris is still of use and it goes without saying that it has to be put on right. If put on too tight, it will cause necrosis. The plaster of Paris after a week can be cut in two, the cast taken off and the limb inspected. Massage can be applied, and during the last two or three weeks it can be taken off at night and put on in the daytime.

DR. JOHN C. FLEMING, Elkhart: This is an excellent paper and the discussion to which we have listened has been interesting and profitable, but, it seems to me, the only very important factor in determining why Buck's extension is often a failure in fractures of the femur has been missed, and that is an anatomical consideration.

When you have a fracture at the upper end of the femur the powerful ilio-psoas muscle will tilt the upper fragment forward. If you put on strong Buck's extension the upper fragment will be pulled forward and your lower fragment will be in a straight line and you are bound to get a bad result. The same thing holds true with regard to the lower end where the powerful gastrocnemius muscles will pull the lower fragment down so that you could not expect in the middle third of the thigh to get good results with Buck's extension. All cases of fracture of the femur will give better results if treated with the limb partially flexed, as the doctor has said, but he failed to call attention to the important reason why that is true, and it is the pull of these important and powerful muscles. I think we can get the same favorable results in these cases with the use of the double inclined plane.

DR. MAURICE I. ROSENTHAL, Fort Wayne: The treatment of fractures by means of weight and pulley reminds me of a prize-fight. The weight and muscles are the principal factors at work, and the doctor seems to be the referee. With weight and pulley you have more or less constant irritation or traction on the muscles, and that is what produces pain, and finally after they have been under the influence of the weight long enough the muscle gives out. The weight gets the better of the fight and the bone settles down in some position. Sometimes, espe-

cially in transverse fractures, you get good reduction and reasonably good position, but the rule heretofore has been shortening. Surgeons are agreed that shortening of half an inch is an excellent result and an inch and a half is a good result. It would appear as though there was nothing new under the sun. This idea of constant distance has occurred to others, and it has seemed strange to me that the device for holding fractures in position so that the distal ends of the bones shall be in constant position, should have been discarded.

Dr. Bruggemann, who is sitting beside me, will remember the apparatus I have at the hospital was the invention of my father. I have seen fractures treated by my father with the old Jarvis adjustor in which the results were excellent. It consists of a rod and opening instead of a screw that Dr. Allen uses. There is a ratchet and opening and a crank handle by which you can lengthen the strip of muscle to any desired length. One end is fixed here at the thigh against the ischium, and the other end is fastened to a wooden sandal over the sole of the foot, and by turning the ratchet you can lengthen the limb to its proper length. It will reduce a fracture, and I can remember seeing this instrument used by my father, and I can remember how comfortable these patients were. That invention is about seventy-five years old and was used by my father for forty years. But there was this disadvantage, that adhesive plaster had not been invented at that time, so that it could be used for the purpose of fixing the sandal. The sandal was fixed on the foot by means of straps and buckles, but the constant pressure on the foot led to the discarding of this instrument. Now, with adhesive plaster, it becomes an easy matter to fix the sandal. I have used this Jarvis adjustor myself until I saw Dr. Allen's work and have come to adopt his method.

The essayist spoke of the ease with which you can put wire together with a soldering iron. Dr. Allen's wire splints have really been a revelation to me. You do not require a soldering iron. It is remarkable how you can put wire together with a strip of adhesive plaster and fix the end as firmly as you can with the soldering iron. I have seen these splints used for finger, arm or leg. They are easily made, are comfortable and light, and I have been very much pleased to adopt them in my own work.

DR. JOHN H. OLIVER, Indianapolis: I want to call attention to the advantage of tenotomy of the tendo Achilles in all fractures of the femur low down to relieve the pull and tilting of the lower fragment forward, with the liability of getting gangrene. I have done it many times before attempting to reduce these fractures

within two or three inches of the lower end of the femur, dividing the tendo Achilles before making any attempt at reduction. Dividing the tendo Achilles before the individual gets out of bed in fractures of the patella has given me excellent results.

DR. SCHMAUSS: I would like to ask Dr. Beasley in closing the discussion how many weeks after the injury was it before he took hold of the last case he mentioned?

DR. BEASLEY (closing): I got her about eight weeks after accident. I have not much more to say in closing the discussion. As to driving nails through the condyles, I do not believe I will try that, because whenever you drive a nail it will only be a few days before it will loosen, because the bone around it will not unite with metal and there will be absorption. That is the reason we get so much trouble with Lane plates. As long as I get good results, I will let somebody else drive nails through the condyles.

In regard to the use of plaster of Paris I am old fashioned. I think it is all right if you know how to put it on. It does not do to put plaster of Paris above the thigh. I use it on the leg, not on the thigh. I cut it in half, so that it can be lifted off to see the condition of the limb. If you put on plaster of Paris and leave it on, you will have a bad result. I got mixed up in a case in which a poor boy had a fracture of the thigh, and the only way we could fix it at all was to put on plaster of Paris and swing the limb up in a high place in one of these devices you put over the bed. I said to the doctor in charge, you cut that cast tomorrow or the next day to loosen up. He called me in about four weeks later. When we took the cast off the bones were separated and I got the blame for it.

DR. SCHMAUSS: It was not the fault of the plaster of Paris.

DR. BEASLEY: No; it was my fault for trusting that other man. Plaster of Paris has its use, but I do not think it is a good thing to put on where there are important muscles like around the thigh. I do not use it there.

Nobody seems to have stood up strongly for Buck's splint. I think it is an abomination and nobody should use it.

Another thing so many practitioners use is a sandbag. I do not hesitate to say that anybody that uses a sandbag ought to be taken out and beaten over the head for using it. If you use a bag fill it with bran. That is comfortable. You can pad it, but sand is not comfortable.

If you will try this splint and use it with judgment, you will get good results.

I thank you all for the liberal and free discussion you have given my paper.

A WORKING KNOWLEDGE OF OPH- THALMOLOGY AND OTO-LARYN- GOLOGY FOR THE GENERAL PHYSICIAN *

GEORGE W. SPOHN, M.D.
ELKHART, IND.

To the busy physician it seems but a short span of time between graduation and years of practice. If all medical students understood the responsibility and seriousness of their future vocation there would be fewer physicians. The recent graduate believes that he is fitted to practice his vocation in all departments of medicine and surgery. The impression may have been obtained from the instruction of his professors or from association with his fellow students. He is honest in his beliefs and his capabilities, and quotes his efficiency in the class-room and in examinations. In college he observed the good work done by his teachers—all skilled specialists. This so impressed him that he enters his own field with self confidence and is willing to undertake any practice from the amputation of a toe to the removal of a brain tumor, or the treatment of scabies to pernicious anemia. He is lacking in proper timidity and extreme carefulness, the two attributes that are acquired by thoughtful study and years of practice. Is it not possible for medical schools to give students the proper mental impressions and a clear knowledge of their professional duties before sending them out as full-fledged physicians? If students receive the wrong instruction or are lacking in instruction, for any avoidable errors by young physicians, the medical schools should be held responsible and not the recent graduates.

The laity is wrongly accusing the profession of having a "medical trust." There is a feeling of unity between members of all professions. Perhaps the nature and sameness of interests produce the sympathetic feeling. There is no written agreement between members of the medical profession to which a physician can subscribe, but there is a mutual unwritten feeling (if not law) to band together for self and professional protection. This condition may have been caused by unscrupulous lawyers who have been preying upon the innocent of our profession. It is possible that physicians have disguised errors in the protection of violators of the law, believing it to be better for the com-

munity and the profession. In time we will have a state committee to which all grievances can be referred. Such an arrangement will save the profession much expensive litigation and many thousands of dollars in insurance.

There are two roads to specialism. The special preparation is taken after a number of years in general practice, or the special preparation is taken immediately after graduation. The former is generally preferred, but is it not possible to specialize and avoid the undesirable parts of a physician's life? It seems to me a young physician with both a literary and medical degree, with eighteen months' hospital experience and two years' experience in an office of a specialist, would be prepared for any speciality. With such preparation, the young physician could begin his practice earlier in life and eliminate the starvation period.

The men who have accomplished great things in life have chosen one line of effort. To select one branch in the practice of medicine and become proficient in that speciality will yield greater results to humanity and more satisfaction to the physician than if all his efforts have been devoted to general practice. There is a difference in results between the skilled wood-worker and the man who does carpentry merely because he has no other employment. So is there a difference in the prognosis of the simple operation of hemorrhoids by the skilled proctologist and the generalist. All things being equal, the specialist who operates many cases in a year should do better work than the generalist who does annually only a few operations.

Very often the laity is a poor judge of medical service. Some physicians have a large practice and hold their patronage through machinations peculiar to themselves. Other physicians who are students and are thoroughly scientific in all their work have a small clientele. If the laity did not have a blinded judgment it would observe the difference in the labor and cures of efficient and inefficient physicians.

It is possible that the propaganda of health movements has been a financial detriment to the medical profession. But the magnanimous humanity of the profession has always encouraged and aided the education of the public even to its own detriment. A knowledge of the laws of health are taking the place of skepticism and superstition. The more intelligent a community, the more careful are its citizens in the selection of its physicians. The public demands honest and better medical service. The tendency is

* Read before the Indiana State Medical Association at Fort Wayne, September, 1916.

toward specialism, and through the narrowed but thorough field of the specialist the demands can be met.

To think of the generalist as a physician who should understand all pathological conditions is doing him an injustice. His field of usefulness has not been contracted, even if he limits himself to the work that he thoroughly understands. His field of practice has been increased because of the improved knowledge and skill of the medical profession.

Much has been written about the old family physician. In fact, pages and pages of rhyme have been written on "the passing away of the family doctor." To say the old family physician is being deserted shows progress. The employment of a physician is a business proposition, and the cure of diseases is a vocation. If I employ John Duncan and pay him, our claims against each other have ceased. The same is true in the employment of a physician. It is a question of good scientific service and pay—not sentiment. The physician who becomes offended when one of his former patients seeks the advice of another physician has forgotten law and good business.

The chief consideration in the selection of a vocation is a livelihood. Medical schools aim to make good citizens and scientific students; but under certain environments some students forget the instruction of their teachers. Young physicians leaving college are often obliged to practice economy. Their habits of necessity may become so established that commercialism becomes the first consideration. Such a physician or surgeon becomes a dangerous man. His desire for gain has so warped his finer sensibilities that all his honor and previous good instruction of his professors is forgotten.

A number of years ago our medical colleges were founded by a few physicians for self-exaltation and self-exploitation, and many of our medical schools even now have the same commercial spirit. The feeling or desire to have fees as large as possible, irrespective of service, has been handed down to the profession by the founders of our medical colleges. When the state will pay stipulated, living salaries to the instructors of our schools, and after certain ages grant life pensions, then will scientific work be separated from commercialism. Then will the examples of our professors, by word and precept, mould their students into men and physicians to the great advantage of suffering humanity and the citizenship of our nation.

The libraries of the generalists will have

modern books in all departments of medicine and surgery, except in ophthalmology, otolaryngology and dentistry. In attending the state or national medical meetings, the generalists can be seen in all sections, save those on otolaryngology, ophthalmology and dentistry. Even when a paper on the eye or ear is read before a mixed audience, the generalists usually find it convenient to leave the room. These facts show that the generalists do not pretend to keep up their studies in ophthalmology and otolaryngology, yet they treat diseases of the eye and ear, remove tonsils and adenoids and many physicians even extract teeth. In practice in which the physician is incompetent the patient does an injustice to himself and his family physician to demand his services. If a physician instills eserine in an iritic and atropine in a glaucomatous eye, and the case becomes blind, who should be blamed for the error? The family physician is honest and does the best he can, but in his desire to do more practice he becomes so impatient that he attempts to treat diseases which he has not fully investigated. The instruction of his alma mater should have been so thorough, his limitations in practice should have been so definite, and his sense of honor made so high, that he would think first of the best interests of his patients.

If, in doing an appendectomy, the surgeon avoidably cuts off an intestine, causing the death of the patient, he should be held for manslaughter. If a physician carelessly makes a diagnosis of simple pharyngitis when it is a typical case of diphtheria, and the patient dies for want of proper medical attention, the physician should be held responsible for the death of the patient. In other words, a physician or surgeon should be held responsible for all avoidable errors. There are cases and conditions which no one understands, but with proper precaution most mistakes can be avoided. A large majority of the profession corroborates in the above statements, even if the viewpoints remain unexpressed.

If the profession did not have the unwritten law of which I previously made mention, physicians and surgeons would not accept patients unless they clearly understood the diagnosis and treatment. Enforced law is very persuasive, but under our present regimen the courts are powerless in the prosecution of guilty physicians and surgeons. In the successful prosecution of one of our profession, testimony must be given by professional brothers. Physicians, as wit-

nesses, give such neutral and evasive answers that a jury will render a verdict for the defense.

All argument and effort should be for efficiency in all departments of medicine. To say that Dr. A. did all that he could in a given case is not standard; it should be said, he did his work according to the most advanced ideas on the subject. The accomplishment of this desideratum can be had by the concentration of a physician's efforts in one channel; viz., specialism. Every physician should be a specialist in one of the departments of medicine. Specialism should be universal.

As the generalist is obliged to treat eye and ear cases, he should have at least a gross knowledge of the subjects. Public health and safety first movements have reduced the practice of eye, ear, nose and throat. But as long as there are no emmetropic eyes, as long as accidents occur, as long as people abuse their eyes, as long as there is gonorrhea, trachoma, or any eye infections, and as long as there are systemic diseases that involve the eyes, there will be eyes to treat. Similar, but more convincing, argument is applicable to oto-laryngology.

The generalist should know the diagnosis and treatment of at least the simpler eye and ear diseases. It is better to do nothing than the wrong thing. In eye diseases there are three symptoms that should be remembered: viz., congestion, including redness and edema, pain and lachrymation. The tripod of symptoms could be produced by a cinder in the eye, but the elimination of a foreign body should make one suspect conjunctivitis, because 30 per cent. of all eye diseases are conjunctival. All cases of conjunctivitis are due to infection or mechanical irritation; if the former, the diagnosis can be verified in the laboratory, and if the latter, the removal of the cause will cure the disease. In conjunctivitis there is a mucous or mucopurulent discharge; in iritic inflammation there is a free flow of hot tears. In conjunctivitis there is no pain; in iritis the pain is sharp in the eye and temple; in a glaucoma the pain is of a neuralgic nature. The redness in conjunctivitis is greatest in the fornices, lessening toward the cornea; in iritis the redness is greatest around the cornea, diminishing toward the fornix. In glaucoma the cornea is generally hazy and anesthetic, but the diagnostic symptoms in glaucoma are increased tension, nausea and pain. In treating conjunctivitis, if the cause is removed, any good astringent will give relief. The treatment of iritis, glaucoma or any of the diseases of the deeper structures of the eye, should be left to the ophthalmologist.

In comparison, the eye has some of the principles of a camera. The muscles of the eye correspond to the screw on the camera, bringing the rays of light to a focus on the retina. Efforts of focalization is often the cause of headaches and various neurological symptoms. Anything that interferes with the mechanism of bringing the rays of light to a focus on the retina is pathologic. Ninety out of every one hundred pairs of eyes are too long, too short or have irregular curvatures. As 90 per cent. of the population is born with abnormal eyes, and with the hard work to which the eyes are subjected, the physician should expect many eye diseases and constitutional symptoms.

About 70 per cent. of all headaches are due to errors of refraction. About 10 per cent. of all headaches are due to sinus engorgement, or possibly mouth breathing. Choreic and many other neurologic symptoms have been stopped by properly refracting the eyes. It is claimed by some writers that rheumatism, neuritis, neuralgias, endocarditis, digestive troubles and abdominal infections receive their etiology from nose and throat infections.

The mechanism of hearing depends upon simple principles of physics for its solution. The apparatus of the ear is a medium that conducts vibrations of air to the internal ear, from which it is transmitted to the brain and recorded as hearing. The external ear and meatus collect the vibrations, the ear drum transmits them over the chain of bones to the internal ear. The stapedius muscle holds the drum taut and regulates it, which is in reality the sounding board of the ear. The eustachian tubes allow pure air to pass in and out of the middle ear. Anything that interferes with this mechanical arrangement causes an interference with normal hearing.

Statistics give from 40 to 50 per cent. of all deafness as due to prenatal causes. Most acquired deafness is due to middle ear trouble which is an infection coming from the tubes and pharynx. With a clean upper and lower pharynx, with no mouth breathing, with both nares free and open and with proper blowing of the nose, there can be no infection of the tubes and middle ears. If generalists and nurses would teach their patients, and health propagandists would teach the public how noses should be blown, earache, pain in and around the ear, ear abscess, mastoid troubles and all its complications would disappear.

If pathologic conditions are corrected in their incipency, the general system will generally

regain itself or establish a normal status. To avoid middle ear troubles or deafness physical defects should be corrected in childhood. The child is born a nose breather and should be forced to continue the habit. Any deviations from the normal should be corrected. Any interference with the physiologic functions of the nose and throat will later in life cause partial or total deafness.

It has been said that all blindness and deafness might have been avoided. To a person who has looked over the Federal Census Reports and our state reports, the assertion does not seem true. To greatly reduce the blindness and deafness in the future, the childbirth rate must be regulated by eugenics, euthenics, pathology, sterilization, selection, mating and pure breeding. The generalist should know and teach purity of childbirth.

All hereditary deafness and blindness are congenital; but all congenital deafness and blindness are not hereditary. Consanguineous marriages are often the cause of blindness and deafness. Congenital deafness usually affects the internal ear. Any disease that affects the internal ear, as scarlet fever, cerebrospinal meningitis, ends in partial or total deafness.

Partial or total deafness of the middle ear is an acquired condition which generally comes on later in life. In the report of the Indiana State School for the Deaf, Superintendent Richard O. Johnson gives statistics to show that Indiana has a decrease of acquired or adventitious deafness. This speaks well for the otologists of the state because this form of deafness is amenable to treatment. Superintendent Johnson also gives data to show that inherited or any form of deafness of the internal ear shows an increase in the state of Indiana. The ratio of the deaf to the population is greater in Indiana than any state in the union except Maine. The high rate of deafness in Maine is due to congenital conditions, causing deafness. The high rate in Indiana is due to spinal meningitis. The epidemic of spinal meningitis in 1870 spread from Kentucky to Indiana. This is a field for the generalists, not only the prophylactic treatment of all diseases that attack the internal ears, but also the education of the general public so that the marriage laws will be enforced.

It is a question of economy for taxpayers to have none or as few defectives as possible. Until our laws are enforced we must grope in the dark and make the best of the situation. It is only right that a state should feed, clothe and educate its offspring, even though some should not have been conceived.

The Federal Census Report of 1910 gives Indiana a blind population of 2,332 persons. The Report of the Indiana School for the Blind shows an attendance of 148 pupils. At the rate of expenses given in the report, it will cost the state \$621,600 to educate the 148 pupils. C. D. Chadwick, Secretary of the Indiana Board of Industrial Aid, says there are about 2,000 blind persons in the state, outside the school, and 75 per cent. are non-supporting. The expense or their keep to friends and relatives, citizens of the state, annually would be about \$390,000. The loss to the state in not being profitably employed would equal about \$520,000. This would be a loss to the state annually for her blind about \$1,531,600. Computing estimates for the deaf population on the same basis, the expense to the state would be \$3,573,733. The grand total expense to the state of Indiana for its blind and deaf persons would be annually about \$5,105,333. This is more money than is annually paid to all the physicians in the state.

Indiana's other institutions caring for her defectives are on the same basis as her blind and deaf asylums. To think of the financial loss to the state is staggering. It is a great field for reformers, clarifiers of politics, law-makers and all the physicians of the state.

DISCUSSION

DR. E. M. SHANKLIN, Hammond: While my name appears on the program as one of the leaders of the discussion on Dr. Spohn's paper, through unfortunate circumstances I was not aware of the fact until this morning. I thought two generalists were to take up the discussion.

There can be no question, I think we will all agree, that the generalist should have a working knowledge of both oto-laryngology and ophthalmology. The question is, how can that be best brought about? My solution would be this: To have more papers written and read in an understandable way in the meetings of the various county medical societies by the members specializing in eye, ear, nose and throat work. We very frequently have cases sent or brought to us by some one in general practice who has been treating that case for a period of time in which the diagnosis has been quite a bit far-fetched. You have all had cases brought to you, I am sure I have had a lot of them myself, in which the trouble had been regarded lightly and the fact is you have a very beautiful corneal ulcer. You have had cases diagnosed as granulated lids, and just on that point I want to reiterate a statement made two years ago, that I think one of our greatest duties in the elimination of trachoma is to teach the oculist not to be so free in the use of the words "granulated

lids," as applied to minor inflammatory conditions of the eye. Such free use of these words leads ultimately to the formation in the mind of the patient that granulated lids do not amount to much because the condition that has been called granulated lids will clear up in two or three days under proper treatment. Fortunately, those of us who are in the larger communities and are engaged in the so-called syndicate practice or located in a building largely populated by physicians, are able to point out the little matters of differential diagnosis, etc., in cases coming under our particular specialty and in that way the generalists so located have that particular advantage. There have been a number of talks given during the last year, particularly in the northern part of the state, on the conservation of vision, and in those that I have given I have made a special effort to have the general practitioners present, because in the talks to the public along the lines of conservation of hearing and vision there is a great deal that can be well absorbed and to a very good purpose by the generalist.

The greatest benefit from Dr. Spohn's paper will come from its publication in *The Journal*, where it will be read by the generalists all over the state.

DR. WM. CAMPBELL POSEY, Philadelphia: I would like to speak on one phase of the subject which I am very sorry to note the doctor did not mention in his very interesting paper, and that is that the general medical man should be aware of the danger of our optometric friends in the propagation of blindness. How often do we see cases of chronic hardening of the eyeball overlooked by these men. I recall a case in a man 50 to 65 years of age whose trouble began when he noticed a slight failing of vision. He went to an optometrist who fitted him out with a pair of glasses and he was assured his eyes had all the attention necessary to prompt relief. But after two or three months the man went back to the optometrist saying that something was wrong. He was given another pair of glasses, but this time as before there was no improvement. Six months later he visited the optometrist again and was told that perhaps he had a cataract. He was told the doctors could do nothing for him until he was blind so he was advised to wait until blind before seeing an oculist. At the end of two years he came to the hospital with what he thought was a cataract. He said he wanted to be operated on and cured. This was the first time a physician had seen him. He had a well defined glaucoma; pain, redness, etc. The general man should know chronic hardening of the eyeball because these cases come to them frequently

Had early ophthalmological aid been given this man, in all probability his sight could have been saved.

I have another case in mind, a woman 40 years of age, with tumor of the brain. I made the first ophthalmoscopic examination. Some months before she had noticed some trouble with her vision. She went to the optometrist who gave her glasses and told her they would last her many years unless some trouble should develop inside her eyes. In the meantime she developed a mild paralytic stroke, which was never clearly recognized and as I said, the first ophthalmoscopic examination was made by me in the last two or three days. Yet for weeks the medical men had been unable to make up their minds what was wrong. There was an ophthalmologist living within a few squares of her house and the information could have been had for the asking.

It is a good thing to have frequent meetings where ophthalmologists may inform the general medical man something of what we know and what we can do. We have such a meeting in Philadelphia once a year and we find a very great benefit from it.

Taxes! Taxes! Taxes everywhere and on everything! Politicians for years have been telling the people of this country that they do not know what it is to be taxed, and we are beginning to find out how truthful they have been. Aside from the high prices of all commodities, brought about in some cases by scarcity and in other cases by the unwarranted manipulation of dealers, we are just beginning to feel the oppressive hand of the government in taxes that threaten to be very burdensome to all classes of people before this little scrap of ours is settled. Doctors are going to feel the pressure more than many other classes of people, for the reason that as a general thing they have not kept pace with the tendency of the times by charging any more for their services, and a large percentage of their clients will be unable to pay as well as they did when normal conditions prevailed. However, this is a time for sacrifice, and whether we like it or not we shall be compelled to groan under increased taxation and the necessity for contributing money to various enterprises connected with the war, submit to diminished incomes, and perhaps render services at the front, all of which goes to make up a real eventful life.

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EDITORIALS

EPIDEMIC MENINGITIS

During the years 1913 and 1914 cerebrospinal fever prevailed in England to a somewhat greater extent than in previous years; however, in the first half of 1915 the disease assumed epidemic proportions.

There were 305 cases in 1913, 315 cases in 1914 and 2,565 cases in 1915. This increase coincided with the military mobilization of a large part of the adult male population. The civil population contributed more cases than did the military; however, the infection of the former seemed to originate from the latter. The highest number of cases occurred in the military population during the third week of March, while the highest number in the civil population occurred during the third week of April.

The finding of meningococci in the cerebrospinal fluid is of the greatest diagnostic value, but the finding of meningococci-like organisms in the nasopharynx of contacts is hard to interpret. Still more difficult to interpret are the findings of meningococci in the throats of persons who have never been in contact with a case of meningitis.

To decide the last question, Dr. Eastwood¹ of the London (England) Local Government Board examined throat smears from 480 non-contacts; 269 were males, and of these, 13.4 per cent. contained meningococci-like organisms, and of 211 females, 6.2 per cent. were positive. The recognized microscopic cultural and fermentation tests were employed in each case.

The twenty-eight strains of meningococci thus obtained were tested serologically, using seven non-valent sera prepared from cerebrospinal strains. Fifteen of the non-contact strains agglutinated 1-200, six in dilution 1-100 and seven failed to agglutinate in higher than 1-50 dilution.

Their conclusion is that all strains of gram-negative cocci, obtained from the throat, iden-

tical microscopically, culturally and in fermentation tests with meningococci, must in default of a specific test for virulence be considered meningococci.

The meningococci isolated from the cerebrospinal fluid belonged to four classes according to serological tests.

They also found that:

1. The maximum period during which meningococci can be isolated from the throat of convalescents exceeds three months, and that
- (2) meningococci isolated from the throats of patients were identical with those isolated from the spinal fluid in the same cases.

Our conclusions are:

1. Meningococci are comparatively frequent in the throats of the general population.
2. When young men are brought into military concentration camp meningitis tends to become epidemic.
3. The military camps are likely to suffer severely from epidemic meningitis, but the children in the cities where the concentration camps are located develop the disease in a much greater percentage than do the soldiers.
4. The increase of meningitis among children is due to contact with soldiers having meningococci in their throats.

GOVERNMENTAL "RED TAPE" SHOULD BE ABANDONED

In some of the detention camps of this country much preventable sickness has occurred. It is quite true that men are going to those camps from all over the country and bringing infections with them, but there seems to be a striking lack of facilities properly to care for the diseases that are brought to the camps. It also is very patent that the medical officers are without sufficient authority, and everything is burdened with a lot of needless and injurious "red tape." For instance, it is reported that at one camp barracks are not built for housing the soldiers because the specifications call for lumber of certain dimensions and no other, and no contractor can be found who can carry out the specifications with anything like reasonable promptness. To insist that barracks shall be built of boards that are 12 inches or over in width when 6, 8, or 10-inch boards will answer just as well, and can be obtained readily, is the height of blundering when our soldiers need shelter. Furthermore, to hold a medical officer's orders pertaining to sanitation or the care of the health of the soldiers in abeyance until

¹ Report of London Local Government Board, new series, No. 110.

the orders can be rejected or approved by a military officer not connected with the Medical Department is the height of absurdity. In fact, the surgeons-general should be accountable to no one above them for orders that pertain to the health of our soldiers.

Undoubtedly as this war progresses there will be many modifications in the rules and regulations that are in force at the present time, for unless the Government does away with a lot of the inconsistencies upheld at the present time, and unless a whole lot of the useless "red tape" that now surrounds governmental action is done away with, we shall pay a heavy penalty as a result of inefficiency. Soon we shall be sending one or two million of our young men to war. We have a right to expect that these young men will be protected against incompetency or neglect. To the Medical Department of the Army and Navy will fall the duty of looking after the health of these young men, and bureaucratic incompetency should not be permitted to interfere with this duty.

PATRIOTISM NOT CONFINED TO THOSE WHO GO TO WAR

From various parts of the state come reports to the effect that some of the younger physicians who have jointed the Medical Officers' Reserve Corps or have accepted positions with hospital units or base hospitals are severely criticising some of their confreres for not doing likewise, and in some instances making the charge that selfishness, cowardice or lack of patriotism is responsible for failure to offer services to the country. It is a great mistake to indulge in criticism of any young doctor who does not offer his services to his country in war times. Patriotism and unselfishness is not confined to those who go to war. The man who stays at home may do so because he is compelled to do so against his desires and against his will. There may be "slackers" in the medical profession, and we strongly suspect that such is the case, but it is the height of absurdity to count as a "slacker" every young man who stays at home.

Some men must remain at home because of ill health or other physical unfitness, or because he has obligations which make it almost suicidal for him to leave, and especially in view of the fact that he can be of service at home where he is needed and where others of his kind may be needed. In short, it must be remembered that every man and every woman can do his or her

part in supporting the Government in war times, and the war will not be won by putting all the men in the army, any more than it will be won by putting them all on the farms or in the factories. Doctors will be needed with the troops in Europe and in the training camps in this country, but likewise doctors will be needed at home to examine recruits and to care for the civilian population that is laboring to furnish sustenance for those who are fighting. That each man will do his part, whether at home, in office, farm or factory, or at the front in the trenches, or in the hospitals, is expected, for it is no time for shirkers, but let there be no unjust criticism of the motives of those who for one cause or another are not in the battle zone.

WAR CENSORSHIP

President Wilson and his advisors are making a strenuous effort to secure rigid censorship of all news pertaining to the war, and even before any law bearing on this subject has been passed by Congress, the editor of the Administration's daily paper has seen fit to condemn those newspapers that have criticized governmental department heads for costly blunders. We believe that there is a great deal of news concerning the war that should be suppressed, as for instance concerning the movement of ships and troops and the location and kind of defences prepared by this country, but, on the other hand, there should be no censorship which prevents free and frank criticism of governmental mismanagement. In reality it is the sharp criticism indulged in by certain newspapers in England that has brought about needed and highly beneficial reforms in England's management of the war.

It would be suicidal for this country to make a law which would effectually prevent criticism of officers of the United States who are guilty of the rankest kind of blunders and mismanagement, the continuance of which might be indefinite if the public was unacquainted with the facts. Even now the Medical Department of the Army and Navy is handicapped by this policy of punishing any officer who dares to speak his mind freely concerning policies that he knows to be detrimental. Every newspaper or other periodical read by the public should be restricted in the publication of news or other information that may be used by the enemy in war times, but it is not to the best interests of the country to enforce a censorship which will cut off all criticism of governmental policies.

DO YOUR DUTY!

We now are at war. Our enemy is the most powerful military organization that ever was developed. He is a stubborn foe, one who intends to conduct the most ruthless kind of warfare in every possible way. The war can really be won in only one way, by the disruption of the enemy's military organization. This will require a mighty effort, an effort to which every person must contribute his or her part.

We physicians must and will do our duty. The least we physicians can do is to offer ourselves and our services to the Government. The Medical Reserve Corps of the Army, the Naval Reserve Corps and the Coast Defense Reserve Corps needs thousands of physicians. Those who are eligible and qualified to join any branch of the fighting forces of the country dare not hold back. The importance of having a sufficient number of medical men in the military organization of a country cannot be exaggerated. Let us show our country that in time of need it can count on the support and service of all the physicians, both collectively and individually.

There is another way in which the physician can do his part. If he cannot join the fighting forces, surely he can join the producing forces. Every person who is able ought to be a producer of food. The demand for food is urgent, not only here but in every corner of the globe. The pinch of high prices is affecting every one of us in this country, but the pinch of absolute scarcity or lack of food is taking away the lives of great numbers of the inhabitants of many of the European and some of the Asiatic countries. At present supply and demand are out of proportion, and the longer the world-war continues the greater will be the disproportion. Supply must be increased to meet the increasing demands. In our country the advantages and opportunities for increasing the food supply are much more favorable than in any other country. What is needed is a concerted effort on the part of the whole population to produce as much as possible. No matter how small the amount produced, it will be a definite addition to the sum total, and this total cannot be too much. In fact, no matter how great it may be, it will still be not enough. In a war the problem of supply is one of the most important for the belligerent to solve, so that the more successful we are in our production of food—not only for ourselves, but for all our Allies—the better equipped will we be to bring to an end in the

shortest possible time this decisive struggle between autocracy and liberty.

Another important duty is to keep one's purse open for every worthy cause. In times such as these, although prices of nearly everything have mounted so high, and although the additional burden of war taxes has to be carried, one's heart and one's purse must be open to give support in every direction where support may be needed. No doubt appeals will come much more frequently than ever before, but no matter how often they come, if they are for causes that should be aided the appeals should not be turned down. Physicians, in particular, more than any other class of people, must lead the way in their sincere and whole-hearted contributions to help wherever help really is needed. Our predecessors have established a reputation in this respect that we must keep up. Let us all do our duty!

EDITORIAL NOTES
DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

INDIANA was well represented at the New York session of the American Medical Association, eighty-four doctors from this state being registered.

THE American Medical Association did itself justice when it made Dr. Arthur Dean Bevan of Chicago President-elect. No man in the medical profession is more deserving of the honor, and the Association could not have selected a man who would do it greater credit.

MORE and more evidence is accumulating to show that political favoritism is playing a great part in America's war preparations. We had hoped that politics would be forgotten in times like these.

THE New York session of the American Medical Association was eminently successful. The attendance was only a little short of the Chicago session of 1908, the New York registration being 5,147 as compared to 6,466 at the Chicago session. An extensive series of clinics, given during Monday and Tuesday by the local profession, was a notable feature; and the patriotic meeting, held on the evening of June 7 instead of the reception which is usually tendered the President of the Association, was a timely expression of loyalty, and evidenced the patriotism felt by the medical profession as a whole in our nation's crisis. The New York physicians proved themselves most hospitable entertainers.

THE American Medical Association, at the annual session in New York City, took a decided stand in regard to the use of alcohol either as a beverage or therapeutic agent, and the resolutions passed were an evidence of how greatly medical opinion regarding the place of alcohol in the therapeutic armamentarium has changed in recent years, and were a strong blow to the slowly waning liquor element. The resolutions follow:

WHEREAS, We believe that the use of alcohol is detrimental to the human economy; and

WHEREAS, Its use in therapeutics as a tonic or stimulant or for food has no scientific value; therefore, be it

Resolved, That the American Medical Association is opposed to the use of alcohol as a beverage; and be it further

Resolved, That the use of alcohol as a therapeutic agent should be further discouraged.

THE National Council of the American Society for the Control of Cancer, at its meeting in New York City on June 4, unanimously adopted the following resolution, expressing their appreciation of the report on the mortality from cancer in the United States Registration Area in 1914, published by the United States Bureau of Census:

Resolved, That the American Society for the Control of Cancer strongly commends the action of the United States Bureau of Census in publishing its notable report on the mortality from cancer in the United States Registration Area in 1914, and records its appreciation of the courteous cooperation of the director of the Census and all the members of his staff who contributed to the compilation of this unique volume, which represents an unparalleled contribution to the statistical study of malignant diseases, and has already furnished the basis for many promising special investigations.

IN an address before the National Association for the Study and Prevention of Tuberculosis (printed in the June number of the *American Review of Tuberculosis*) A. K. Krause of Baltimore emphasizes the urgency of better teaching of tuberculosis in our medical schools. He maintains that at present the disease is studied only in a haphazard way, and outlines a course which at least would mean a practicable beginning in the task of developing a better teaching plan, thus turning out physicians alive to the importance of this disease, conversant with its pathology, clinical manifestations and the social problems arising therefrom. Certainly such a course not only would be valuable, but desirable, and due the people who are looking to the medical profession to curb this plague.

AN effort is being put forth to arouse the nation to the necessity of food conservation. Sunday, July 1, was designated as "Food Saving Day," and the ministers all over the United States were asked, and very generally observed the request, to call attention from the pulpit to the question of food conservation. Newspapers and other periodicals are carrying in display type the motto "Save the Waste and Win the War." The doctor, too, has a responsibility along this line, for the people will turn first to the doctor for information as to the most nutritious diet, the amount of food to be taken, and various other questions along this line. Let the medical profession shoulder this responsibility, and let each physician use his influence in seeing that people eat wholesome food, the proper amount, and that there be no useless waste.

UP to July 1 the following Indiana doctors had been ordered to report for duty at the various training camps:

Fort Benjamin Harrison, Indiana: Lieuts. Roy B. Storms, Kempton; James M. Smith, Lehman M. Dunning, Claude Du Vall Holmes, Arthur F. Weyerbacher, Indianapolis; Oliver O. Alexander, Terre Haute; Zera M. Beaman, North Manchester; Clinton H. Beckett, Attica; James Duckworth, Indianapolis; Baruch M. Edlavitch, Fort Wayne; Laurence E. Jewett, Wabash; Maurice H. Krebs, Huntington; Otho R. Lynch, Peru; Jesse L. McElroy, Indianapolis; Edgar H. Myers, South Bend; Garland D. Scott, Sullivan; John P. Shomer, Peru; John M. Titus, Hebron; Capt. John A. Martin, Indianapolis; Lieuts. William S. Ehrich, Evansville; Edward J. DuBois, Paul B. Coble, and Frederick C. Warfel, Indianapolis; E. Adrian Fauve, Fort Wayne; Ephriam B. Chenoweth, Nineveh; Clayton C. Campbell, Walton; Capt. George L. Guthrie, Indianapolis; Lieuts. George G. VanMater, Peru; Ernest De Wolfe Wales, B. T. Daggy, Fred E. Hickson, Floyd N. Shipp, Eddie De B. Thixtum, Cecil L. Wayman, William F. Clevenger.

and Blanchard B. Pettijohn, Indianapolis; George C. Carpenter, Terre Haute; Albert W. Collins, Anderson; Harold B. Cox, Morristown; Paul Higbee, Sullivan; Earl D. Jewett, St. Paul; Valentine A. Magenheimer, Mooresville; Elmer B. Moser, Windfall; John T. Smaples, Boonsville; Henry H. Thompson and Frederick A. Tucker, Noblesville; Frederick M. Whistler, Wabash; William H. White, Edinburg; L. H. Redman, Elizabethtown.

Fort Sheridan, Illinois: Lieut. Claude H. Ogden, Gary.

Fort Oglethorpe, Georgia: Capt. James W. Squiers, Fort Wayne; Lieut. W. W. Harris, Ellettsville.

Fort Riley, Kansas: Lieut. Karl T. Brown, Indianapolis.

Army Medical School, Washington, D. C.: Lieut. J. L. McElroy, Indianapolis.

New York: Lieuts. Arthur E. Guedel, Indianapolis; and Ulysses G. Goodwin, Monticello.

Syracuse: Lieut. Edward G. Brandenberger, Rockville.

Home from Southern Department: Lieut. Barzilla M. Hutchinson, Mishawaka.

At this writing people of the city of Fort Wayne are being treated to some uncalled for newspaper publicity concerning disagreements in the management of Hope Hospital, sometimes known as the Protestant Hospital of Fort Wayne. Prior to the outbreak of the war a large sum of money was raised by public subscription for the purpose of erecting a new hospital to take the place of the old one that was dilapidated and thoroughly unfit for present needs. The rapid rise in the cost of building operations made it necessary to postpone the erection of a new hospital, and to care for present needs the board of directors contracted to take over a private hospital on terms that did not entirely meet with the approval of the Hope Hospital staff and Training School for Nurses. To still further complicate matters, the board of directors decided to do away with the staff and depend on an advisory committee composed of physicians of their selection. Very naturally there was open rebellion on the part of the staff and nurses, and it looks as though the hospital is doomed to suffer unwarranted and unmerited discredit in consequence. The business management of a hospital may with perfect safety be entrusted to a board of laymen, but no hospital worthy of the name is ethically and efficiently run along the most approved lines without a staff of reputable physicians and a well organized and well conducted training school for nurses. It is true that abuses may creep in under any management, but there is no reason why those abuses cannot be corrected soon after recognition, and means should be adopted to limit the evils that are easy to anticipate. For a board of directors com-

posed of laymen to do away with all restrictions and to ignore most all of the ethics which should surround a reputable hospital, simply to "get even" with a hospital staff reputed to be a clique and running a hospital to suit its own purposes, is suicidal. The trouble with the average layman is that he knows no more than a rabbit about running a hospital, and he has a very vague conception of what constitutes ethics and the dangers of permitting a hospital to run without certain restrictions that make for ethics, general morality and efficiency of service. On the other hand, a staff should be governed by certain regulations that are imposed, not for the benefit of the staff primarily, but for the benefit of the hospital and the public which the hospital is expected to serve. A hospital that is supported by the public should be open to all who have a legitimate right to go there, but the interests of the hospital must be safeguarded, and the only way that those interests can be safeguarded is through a well organized medical staff and an active working training school for nurses. It is sincerely hoped that an institution like Hope Hospital, so much needed in the city of Fort Wayne, will not suffer at the hands of a misguided board of directors, or the selfishness of a medical staff. There is no reason why the dissenting factions cannot get together, but a hospital cannot be run along the most approved lines and follow the plan proposed by the laymen who now seemingly hold the destinies of Hope Hospital in their hands.

DEATHS

HOMER STALKER, M.D., Borden, died June 24, aged 35 years.

HERCULES OGLE, M.D., Wabash, died June 10, from a mastoid trouble, aged 73 years.

MARY A. BAIR, widow of the late Dr. A. W. Bair, Bryantsville, died June 28, aged 83 years.

GEORGE A. TEAL, M.D., died suddenly of heart trouble at his home in Kendallville, July 3, aged 60 years.

CURTIS VINCENT STEVENS, M.D., formerly of North Madison, died June 20, at Harrisburg, Pa., from ptomain poisoning.

GEORGE B. MOORE, M.D., Strawtown, died June 29, aged 75 years. He was the oldest practicing physician in Hamilton County.

JAMES G. WARD, M.D., for thirty years a practicing physician of Bloomington, died June 17, aged 71 years.

CHARLES E. SCHOLL, M.D., retired physician of Logansport, died June 17 from concussion of the brain, following an injury received three weeks previous. He was 75 years of age and a veteran of the Civil War.

FRANCIS W. JOHNSON, M.D., Utica, died suddenly July 3, aged 47 years. He had practiced medicine at Utica for fourteen years, was a member of the Clark County Medical Society and the Indiana State Medical Association.

SCOTT P. LAMEROUX, M.D., for many years a practicing physician in Indianapolis and Marion County, died June 8 at the hospital of the Indiana State Soldiers' Home, Lafayette. He was 70 years of age and served in the Civil War.

ISAAC F. SWENEY, M.D., aged 72 years, died June 30 at his home in Milton. Dr. Sweny was a member of the Wayne County Medical Society and the Indiana State Medical Association, and up to a year preceding his death he held an enviable record of attendance at the meetings of his county medical society.

HENRY ALBERT FOX, M.D., died June 17, at his home in Gosport, aged 54 years. Dr. Fox was born in Bruceville, Knox County, graduated from the University of Vincennes, Vincennes, Ind., and the Starling Medical College, Columbus, Ohio, and shortly after, or in 1892, he located in Gosport for the practice of his profession, where he built up a very satisfactory practice. He was a member of the Owen County Medical Society and the Indiana State Medical Association.

RICHARD ELI HOLDER, M.D., Columbus, died suddenly June 5, while attending the annual session of the American Medical Association at New York City. Dr. Holder was born near Columbus in 1851, graduated from the Medical College of Ohio, at Cincinnati, in 1879, and took postgraduate course at the Bellevue Hospital College of Medicine, New York, in 1884. He has practiced almost continuously in the city of Columbus, specializing in anesthesia, and was considered one of the most successful anesthetists in Southern Indiana. He was a member of the Bartholomew County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Lilly Base Hospital is to be known as Base Hospital No. 32.

THE Hollis Hospital at Hartford City is undergoing extensive repairs and improvements.

DR. E. O. HARROLD of Marion was married, June 12, to Miss Ione DeMarcus of Danville.

DR. JOHN H. OLIVER has been succeeded as head of the Lilly Base Hospital by Dr. Edmund D. Clark.

DR. S. M. VORIS, who has been in Minnesota for the past several months, has returned to Columbus.

THE fourteen-year-old son of Dr. and Mrs. I. M. Casebeer of Newport met with a tragic death recently.

DR. R. D. ARFORD, formerly located at Honey Creek, has removed to Middletown, and will continue his practice there.

ACTIVE arrangements are under way for the building of the new General Hospital at Gary. The building is to cost about \$125,000.

DR. PAUL F. MARTIN of Indianapolis who since May, 1916, has been in hospital work in Austria, arrived home early in June.

DR. BUD VAN SWERINGEN of Fort Wayne was operated on recently at the Lutheran Hospital, Fort Wayne, for gall bladder trouble.

DR. J. H. AUD has taken over the practice of Dr. E. D. Jewett at St. Paul. Dr. Jewett has joined the Medical Corps of the U. S. Army.

DR. CHAS. H. MAYO, president of the American Medical Association, urged at the recent New York session that a medical officer be added to the cabinet of the President of the United States.

DR. ROBERT E. LEE, formerly of Oxford, has accepted a position on the medical staff at Mudlavia. He takes the place of Dr. E. O. Little, who has been ordered to Atlanta, Georgia, with the Medical Reserve Corps.

DR. W. H. THOMPSON, for several years practicing physician at Harlan, has located at Celina, Ohio, where he will establish his future practice.

DR. ALBERT E. BULSON, JR., and son Eugene of Fort Wayne spent the latter part of June and the first of July at Fort Myers, Florida, on a fishing trip.

THE contract for the erection of the new Wells County Hospital at Bluffton has been awarded, and work begun on same early in June.

DR. OSCAR C. BREITENBACH of Columbus announces the removal of his offices from 748 Washington Street to Suite 26-27 Bassett Bldg., Columbus.

DR. R. M. TILTON, formerly of Nashville, has purchased the practice and office of the late Dr. R. E. Holder of Columbus and removed to that place.

DR. IRA A. NELSON, formerly of Crothersville, has recently returned from the war front where he served in the medical corps of the Canadian army.

DR. G. E. WILLOUGHBY, Gosport, was slightly injured in an automobile accident on June 17. Mrs. Willoughby and daughter Rebecca also received injuries.

THE medical profession of Spencer, Owen County, have adopted a new fee schedule, including a reasonable advance in fees for all professional attention.

THE Huntington County Medical Society gave a farewell banquet in honor of Dr. M. H. Krebs who left early in June for the training camp at Fort Harrison.

DR. FRED G. EBERHARD, South Whitley, was married recently to Miss Charlotte Drinkwater, Denver, the wedding taking place at the home of the bride in Denver.

THE White County Medical Society at their monthly meeting June 15 were addressed by Dr. W. H. Thompson of Lafayette on the subject of "Infantile Paralysis."

DR. S. A. SHOEMAKER, Bluffton, recently was appointed health officer for that city. He formerly had a period of years in the administration of public health affairs.

SIX permanent hospital buildings are in process of erection at the Plattsburg Camp, New York, which it is expected will provide facilities for a camp of 10,000 men.

DR. and MRS. I. H. GRIMES of Danville have been taking an extended auto trip through the East, visiting New York, Philadelphia, Washington, Buffalo and Niagara Falls.

THE Fulton County Medical Society was entertained on June 15 at the home of Dr. B. F. Overmyer at Leiters. Dr. D. S. Gilbert of Logansport read a paper on "Poliomyelitis."

THE LaGrange County Medical Society met in LaGrange, May 31, at which time Dr. Albert Woelfel of Chicago and Dr. C. C. Grandy of Fort Wayne were the principal speakers.

FIVE nurses received diplomas at the graduating exercises of the Nurses' Training School of the City Hospital at Marion on June 26. Dr. W. A. Fankboner delivered the address.

THE "Better Babies" meeting, held under the auspices of the Fulton County Medical Society, was attended by fifty mothers, and was considered a very valuable and helpful meeting.

DR. RAYMOND J. SPROUL, son of the late Dr. John S. Sproul of Warren, will leave soon for France as eye and ear surgeon with Army Hospital Corps No. 34, organized in Philadelphia.

REGINALD W. COOK, chiropractor of Montpelier, Ind., recently was found guilty of practicing medicine without a license by the jury of the Blackford circuit court, and was fined \$25.

DR. G. E. REYNOLDS of Columbus is looking after the practice of Dr. Redmon at Elizabethtown three days in the week while Dr. Redmon is in the Medical Service of the United States Army.

DR. A. E. GUEDEL of Indianapolis, formerly superintendent of the Deaconess Hospital, left for New York recently, and probably now is on the Atlantic or already arrived "somewhere in France."

NOTRE DAME UNIVERSITY at South Bend is adding a two-year medical course to its present program. The full four years' course is not to be given because of lack of clinical facilities in the city of South Bend.

DR. J. S. LEFFEL of Indianapolis, lately graduated from the Indiana University School of Medicine, has located at Connorsville and will be associated with Dr. J. R. Mountain in the practice of medicine.

THE second convocation of the American College of Physicians took place at the Hotel Nassau, Long Beach, Long Island, on June 5. About fifty physicians of national repute were admitted to fellowship.

DR. R. O. HAWTHORNE, recently of Illinois, has located at Gary for the practice of medicine. Dr. Hawthorne is a graduate of Northwestern University Medical School, and served as intern at Wesley Hospital, Chicago.

DR. A. P. F. GAMMICK of South Bend, who has been with the British Royal Academy Medical Corps serving in France, has been decorated with the Croix DeGuerre, the French Cross of War. Dr. Gammick is expected home soon.

THE staff of interns at the City Hospital, Indianapolis, went on a strike June 15 because William Gibbs, colored, was named as an intern at the hospital. They returned to work the next evening, following the dismissal of the colored intern.

INDIANA FIELD HOSPITAL No. 1 of Indianapolis, commanded by Major Larue D. Carter, was the first Hoosier guard organization to be called for field duty in the war against Germany. They arrived at Fort Benjamin Harrison for duty on June 11.

WITH Volume II, Number 6 (May) the *Medical Clinics of Chicago* ceases as a separate publication, being merged into the *Medical Clinics of North America*. The new publication also will appear bi-monthly, and is put out by the W. B. Saunders Company.

PLANS for the new medical school building for the Indiana University School of Medicine have been accepted by the board of trustees of the University, and submitted to the Governor for approval. Work on the building will proceed as rapidly as funds will permit.

DRS. W. A. HOLLOWAY and John Bradfield, Logansport, are attending clinics at the Harvard Medical School at Boston. They were accompanied on the Eastern trip by their families. They will be gone the entire month of July.

DR. G. B. JACKSON was re-elected president of the Indianapolis city board of health; Dr. T. B. Eastman named vice-president, and Dr. Herman G. Morgan, city health officer, was retained as secretary. Other members of the board are Drs. R. O. Alexander and E. B. Mumford.

DR. H. E. SHARRER of Hammond has been appointed acting chief surgeon in the Chicago district for the New York Central Lines, including the Lake Shore, C. I. & S. and Indiana Harbor Belt railroads. He fills the position vacated by Dr. F. E. Pierce who was called for military service.

DR. and MRS. GEORGE F. BICKNELL, formerly of Indiana Harbor, who sailed recently for France, were aboard the liner *Rochambeau* when it was torpedoed by a U-boat a short distance out of a French port. However, word has been received of their safe arrival at their post of duty.

THE Bartholomew County Hospital met in regular session June 12 at Elizabethtown. Dr. G. T. MacCoy of Columbus read a paper on "Tuberculosis"; Dr. A. M. Kirkpatrick, Columbus, spoke on "Radium;" and Dr. J. H. Morrison of Hartsville presented a paper on "Preventive Measures Against the Seen and Unseen Foes of Man."

HOPE HOSPITAL, Fort Wayne, has abandoned the old building occupied so many years, and is temporarily located in the new hospital building recently erected by Dr. A. H. Macbeth on Lewis Street. The erection of a new hospital building, funds for which were raised about a year ago, has been postponed because of the enormous increase in price of all building materials, workmanship, etc.

By the time we go to press the organization of the Lilly Base Hospital unit, officially designated as Base Hospital No. 32, will have been completed and ready for call for service in France. This unit is under the command of Major Edmund D. Clark. The other officers have been chosen, but their names are withheld until they have received their commissions. The unit consists of a medical staff of 24. There are 153 enlisted men, 65 nurses, 10 stenographers and secretaries, and about 10 maids and scrubwomen. Complete equipment is almost ready, and it is probable that the unit will shortly be on its way to the battle front.

ANNOUNCEMENT was made on July 1 of a gift of a \$10,000 trust fund by the late Edward W. Ansted to the city of Connersville to be used for charity at the Fayette County Memorial Hospital, now under construction. The site of the hospital was donated by the late Mr. Ansted, and this additional gift makes possible adequate attention and care of the poor at this hospital.

WORD has been received concerning the safe arrival of Dr. Charles R. Bird, formerly of Greensburg, in Liverpool, via S. S. *Audania*, on May 28. He is located at the Lord Derby War Hospital, Warrington, England, which has a capacity for 3,000 patients, and 2,000 in surrounding auxiliary hospitals. Dr. Bird reports that Americans are received everywhere with cordial and genuine welcome.

At the annual meeting of the American L. R. and O. Society, held at Atlantic City, N. J., June 1, Dr. Daniel Layman, Indianapolis, was elected one of the vice presidents. This makes Dr. Layman chairman of the Middle Section of the society, and, according to custom, he will have charge of the annual midwinter meeting. Dr. Layman presented a paper at the Atlantic City meeting, the subject of which was "Results Obtained by Tonsillectomy in the Treatment of Systemic Diseases."

DURING June the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies: Borchardt Malt Extract Company: Borchardt's Malt Olive; A. Klipstein and Company: Lipiodine "Ciba"; Eli Lilly and Company: Pasteur Antirabic Preventive Treatment (Harris Modification); Horace North: Citresia; H. K. Mulford Company: Hay Fever Pollenin Fall-Mulford, Hay Fever Pollenin Spring-Mulford.

THE Municipal Civil Service Commission of New York City announces an examination for chief medical examiner. The examination is open to all citizens of the United States, but persons accepting the appointment must thereafter reside in the state of New York. Candidates must have a degree from an approved institution, and present evidence of having done, in an official connection, at least ten years' work in the pathologic laboratory of a recognized medical school, hospital, asylum or public morgue, or in other corresponding official capacity. They must have performed at least

1,000 necropsies, and must be at least 30 years of age. The compensation proposed is \$7,500 annually for full-time service. Full particulars and applications may be obtained at Room 1400 Municipal Building, New York City.

THERAPEUTIC NOTES

A. W. STILLIANS (*Journal of Tropical Medicine and Hygiene*, Feb. 1, 1917) states that a 25 per cent. solution of aluminum chlorid in distilled water, dabbed gently on affected parts every second or third day and allowed to dry on, rapidly reduces excessive sweating. Three applications usually suffice, after which one may wait for recurrence before resuming treatment; or one application a week may be made to prevent recurrence.

JOSÉ SUAREZ DE FIGUEROA (*Revista de Medicina y Cirugia Practicas*, March 28, 1917) reports an extremely grave case of chorea which had resisted the most varied and persistent treatment, completely cured through the use of the static current of electricity. The treatments were of thirty minutes' duration given daily for a fortnight, and afterward every four days for six months, at the end of which time recovery was complete.

A NEW serum for gas gangrene has been reported by Weinberg and Seguin (*Press medicale*, Feb. 22, 1917). Nearly two years ago these men discovered the *Bacillus oedematiens*, an anaerobic organism, in certain toxic forms of gas gangrene, and supplementary researches have shown this organism in one third of the cases of gas gangrene terminating fatally. It seems all the more dangerous in that it has been noted in wounded subjects from all points on the military front. Weinberg and Seguin have succeeded in preparing an antiedematiens horse serum with antitoxic and prophylactic properties approaching those of diphtheria antitoxin. While its prophylactic is much more pronounced than its curative power, guinea-pigs to which it is administered in conjunction with or within a few hours after the germ inoculation are saved by it. It has been used with success among wounded human subjects in a few cases. In cases of gas gangrene due to *Bacillus oedematiens*, treated from the outset or after excision of the gangrenous focus, it should prove of distinct value.

G. A. SUTHERLAND, in the *Lancet*, March, 1917, in a lengthy discussion of the action of digitalis on the heart, seeks to establish its sole action of therapeutical value as being due to vagal stimulation and consequent slowing of the heart. He emphasizes the fact that pharmacological investigations have been made only with amounts of digitalis far above those suitable for therapeutical use, and that the results are therefore not strictly applicable to man; and brings out the further point that all of the clinical phenomena of digitalis action on the heart can be induced by stimulation of the vagi by pressure. Only those cases of cardiac insufficiency associated with increased heart rate are benefited by digitalis, and among these such as fail to respond to its use by slowing of the rate always fail to manifest clinical evidences of improvement. He concludes with the statement that the therapeutical value of digitalis, therefore, lies in its ability to stimulate the vagus and slow the whole heart, or to cause some degree of heart block, thus slowing the ventricular rate, and leading to rest, better filling of the ventricle and, as a result of both, to greater force of contraction.

F. G. CANO, T. N. TOWNSEND and J. J. VALENTINE, in the *Medical Record* for April 28, report the production, as a result of laboratory work, of a serum impregnated with phenol and methyl blue for the treatment of gonorrhea. The safety of the serum was proved by animal experimentation, and the medicament was used in more than three thousand patients with the following results: Intravenous injections of the methylphenol serum prevent complications. Pain, discomfort, and other symptoms usually disappear at or before the fifth injection, and clinical and bacteriological cures are effected in six weeks or less. Ten injections are generally sufficient. Syphilis requires its proper additional treatment, and local complications and systemic manifestations disappear promptly. Intravenous and intraprostatic injections are an excellent, rapid and efficient combination. An intravenous administration of 10 c.c. of methylphenol serum, or a more ample injection, into the prostate of normal phenol serum, or both combined, in no way jeopardizes the patient's life. Methylene blue prevents the phenol from exerting its usual action on the red corpuscles, and ensures rapid elimination through healthy kidneys. It preserves the antiseptic power of the phenol and prevents that phenol from interfering with the chemo-

biological function of the white and red blood cells. The serum component favors chemotaxis, it strengthens bodily defense, it prevents anaphylaxis even in debilitated patients, and it replaces the resistance which has been impaired by the demands that already have been made on it. The interdependence of gonorrheal urethritis and prostatitis is so frequent and so close that as soon as an extension of the infection is recognized an injection of normal phenol serum—phenol with methyl blue dissolved in anaphylactic serum—directly into the prostate gland must be given in addition to the intravenous treatment.

SOCIETY PROCEEDINGS

BARTHOLOMEW COUNTY

Bartholomew County Medical Society met at Elizabethtown, June 12, and was called to order by the president, Dr. Maris, at 10 a. m.

Dr. George T. McCoy read the first paper, subject, "What the People Ought to Know About Tuberculosis." The second paper was presented by Dr. J. H. Morrison, "Preventive Measures Against Seen and Unseen Foes of Man," and the third and last paper was read by Dr. A. M. Kirkpatrick on "Radium." All the papers were interesting and freely discussed. Dr. E. G. Regennas of Hope opened the discussion.

Dinner was served at 1 p. m. by the "Wellfare" ladies.

The plan of holding one meeting during the summer months in the rural communities has proved popular and has many pleasing features.

JAMES W. BENHAM, Secretary.

DELAWARE-BLACKFORD

Regular meeting of Delaware-Blackford Medical Society was held in Muncie Y. M. C. A. Building, Friday evening, June 1, with President F. W. Dunn presiding. Minutes of preceding meeting were read and approved.

A communication from the executive committee of the Indiana State Medical Association requesting a contribution of \$1 from each member of our society, to apply on the salary of the Executive Secretary, was read, and a motion was made that this tax be assessed against our membership. Motion carried. Sixteen physicians, among those present, paid their \$1.

The program for the evening was a stereopticon lecture on constipation by Dr. W. H. Foreman of Indianapolis. Dr. W. E. Pennington threw a number of Roentgen-ray pictures on the screen, showing the pathologic situation and condition of the colon in the various types of constipation.

Dr. W. C. Moore of Summitville, who had recently returned from Austria, where he was associated with Dr. Eastman in a hospital unit, was present and gave a very interesting account of some of his experiences, and showed stereopticon views of the hospital features, wounds, fractures and methods of treatment.

Several physicians from Madison County were present.

Adjourned.

H. D. FAIR, Secretary.

MADISON-GRANT COUNTY

Madison County Medical Society met in joint session with Grant County at Rigdon, Tuesday, June 26. Six o'clock dinner was served by the ladies of the M. E. Church. Dr. T. M. Jones, president of Madison County Society, presided.

Dr. Charles D. Humes of Indianapolis gave a talk on poliomyelitis, and told of the bacteria being isolated by Dr. Amos. He warned the people of Indiana that this disease would reach Indiana from the East. Generally enters through the nose and gets into the system through the choroid plexus. Dr. Humes answered many questions asked by physicians present, and made a plea for rigid quarantine. Dr. Clay Ball of Muncie urged the value of fixing the following diagnostic points before the laity: (1) constant fever; (2) hypersensitiveness over spine and legs; (3) stiffness of neck muscles; (4) irritability; (5) drowsiness; (6) Kernig's sign.

Dr. C. M. Mix of Muncie spoke of the after effects of the disease, telling what could be done in way of surgery.

Dr. Charles Sellers of Hartford City showed by charts colloid gold test fever curve effects of immune serum.

Dr. Spurgeon of Muncie told how children could be taught to move the diseased muscles and develop the nerve tracts.

Dr. C. S. Wilson reported five cases which he had treated with good results.

Dr. Earl Daniels, Marion, thought the sporadic short cases should be carefully watched.

Dr. Waters, Middletown, raised several questions.

After voting thanks to ladies for the dinner, and the visiting doctors who took part in the discussion, the meeting adjourned.

SETH IRWIN, Secretary.

NOBLE COUNTY

The Noble County Medical Society met in City Hall at Kendallville, June 15.

The secretary, Dr. J. W. Green, Albion, having been called to the colors, the society elected Dr. W. F. Carver, Albion, to fill the vacancy.

Dr. B. E. Miller of Albion read an instructive and interesting paper on "Mistakes Made in Birth Returns," and emphasized that doctors, as a rule, were careless in the performance of this duty.

Dr. Charles Beall of Fort Wayne presented a paper on "Infantile Paralysis," which was particularly instructive, and followed by a profitable discussion of the subject.

Dr. F. W. Black of Ligonier was elected delegate to the state meeting and Dr. C. A. Seymour of Wawaka, alternate.

Application for membership filed by Dr. J. H. Ravenscroft of Albion.

Adjourned. W. F. CARVER, Secretary.

POSEY COUNTY

Meeting of Posey County Medical Society was called to order at 2 p. m., June 26, New Harmony, by Dr. W. P. Woods. Dr. Charles Arburn of Wadesville was elected president for the remainder of 1917 and for 1918. Dr. S. B. Montgomery of Cynthiana

was elected vice president and Dr. C. L. Rawlings, New Harmony, secretary.

Dr. S. W. Boren described the medical organization of the United States Army, and gave an interesting outline of the manner of handling the wounded.

Dr. J. E. Gudgel of Cynthiana read a paper on "Care of the Practice of the Enlisted Doctor," which was a patriotic address. Dr. Gudgel said that those doctors who are barred from serving with the troops will not be slackers at home, but may be depended on to do their duty ungrudgingly. The question of the collections from the practice belonging to the enlisted doctor was dwelt on. Dr. Gudgel suggested that one third of the collections be turned over to the family of the doctor with the colors, and where the practicing doctor furnishes medicines, as is the general custom here, that two thirds be retained by him.

Dr. C. L. Rawlings explained some matters of legislation concerning the practice of medicine, and emphasized the need of keeping alert to prevent unfavorable action by the state legislature in medical affairs.

A call was made for voluntary subscription to the fund for paying the salary of the executive secretary. This was responded to readily, as the members appreciate the good work being done by that officer.

The secretary was reimbursed for his expenses incurred while attending the recent session of the legislature in the interest of the profession.

It was decided to call the next meeting at Wadesville.

The attendance at this meeting was good, and several visitors were present.

Adjourned. C. L. RAWLINGS, Secretary.

PULASKI COUNTY

The Pulaski County Medical Association met in regular session at Monterey, June 26.

The visiting physicians were the guests of Drs. William Arthur and William E. Kelsey, and a splendid six-course dinner was served at the Monterey Hotel.

Dr. Arthur Kelsey read a well-prepared paper on "Constipation"; one by Dr. George W. Thompson on "Gastric Ulcer," and another by Dr. William Kelsey on "Gastritis."

All the papers were freely discussed by all members present. Dr. William Kelsey enjoys the distinction of being the oldest man in the active practice of medicine in Indiana. He has been in continuous practice more than sixty years.

A fee bill was adopted, prices were raised, and this fact was published in all of the county papers.

The next meeting place will be at the summer home of Dr. G. W. Washburn, Bass Lake, Ind., June 26, 10 a. m., and will be attended by the doctors and their wives and will take the form of a basket dinner and day's outing. Invitations will be given to the physicians of Stark, Fulton and Marshall counties.

Dr. John C. Bradfield of Logansport will read a special paper on "Acute Poliomyelitis."

Drs. Slonaker and Overmyer of Culver were present at the meeting.

C. E. LINTON, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

KEPHALIN-ARMOUR.—The hemostatic phosphatid obtained from spinal cord and brain tissue of mammals. It is essentially the same as Brain Lipoid, N. N. R. For a discussion of the actions and uses see New and Nonofficial Remedies, 1917, p. 124, under "Fibrin Ferments and Thromboplastic Substances (Kephalin)." Kephalin-Armour is applied freely to bleeding or oozing surfaces in 1 to 2 per cent. suspensions in physiological sodium chlorid solution. Armour and Co., Chicago (*Jour. A. M. A.*, June 2, 1917, p. 1625).

THORIUM NITRATE.—A white substance, very soluble in water and alcohol. Soluble thorium salts resemble alum in their local astringent and irritant properties. They are not absorbed from the alimentary canal. The nonprecipitant double salts of thorium are practically nontoxic, even intravenously. Thorium salts are fairly radioactive.

THORIUM SODIUM CITRATE SOLUTION.—Prepared by dissolving thorium nitrate, 10 Gm., and sodium citrate, 15 Gm., in water, neutralizing with sodium hydroxide and diluting to 100 Cc. Being impervious to Roentgen rays, the solution is used to obtain cystograms of the renal pelvis and urinary bladder.

THORIUM SOLUTION FOR PYELOGRAPHY-H. W. AND D., 10 PER CENT.—It is the same as thorium citrate solution. Prepared by Hynson, Westcott and Dunning, Baltimore.

STRONGER THORIUM SODIUM CITRATE SOLUTION.—Prepared by dissolving thorium nitrate, 15 Gm., sodium citrate, 22.5 Gm., in water, neutralizing with sodium hydroxide, and diluting to 100 Cc. It is used for obtaining urethral pyelograms.

THORIUM SOLUTION FOR PYELOGRAPHY-H. W. AND D., 18 PER CENT.—It is the same as thorium citrate solution. Prepared by Hynson, Westcott and Dunning, Baltimore (*Jour. A. M. A.*, June 16, 1917, p. 1817).

BETANAPHTHOL BENZOATE - ANTHONY - HAMMOND CHEMICAL WORKS, INC.—A brand of betanaphthol benzoate which complies with the N. N. R. standards for this drug. Anthony-Hammond Chemical Works, Inc., New York City.

CALCIUM CACODYLATE.—The calcium salt of cacodylic acid containing from 43.5 to 48 per cent. of arsenic in the form of cacodylic acid and free from arsenite, arsenate and monomethylarsenate. It has the mild arsenic action of cacodylates. Calcium cacodylate is white, almost odorless, and very soluble in water.

AMPULE CALCIUM CACODYLATE SOLUTION-MULFORD.—Each ampule contains calcium cacodylate, 0.045 Gm. in 1 Cc. The H. K. Mulford Co., Philadelphia.

CHLORAZENE SURGICAL CREAM.—It contains chlorazene, 1 Gm., in 100 Gm. of a base composed of sodium stearate, 15 per cent., and water, 85 per cent. The Abbott Laboratories, Chicago.

BORCHERDT'S MALT EXTRACT WITH COD LIVER OIL.—A liquid composed of cod liver oil, 20 per cent., and Borchardt's Malt Extract Plain, 80 per cent. The Borchardt Malt Extract Co., Chicago.

BORCHERDT'S MALT EXTRACT WITH CREOSOTE.—100 Cc. contain beechwood creosote, 4 minims per fluid-ounce, in Borchardt's Malt Extract Plain. The Borchardt Malt Extract Co., Chicago.

BORCHERDT'S MALT EXTRACT WITH CASCARA SAGRADA.—100 Cc. contain cascara sagrada, 60 grains per fluid-ounce in Borchardt's Malt Extract Plain. The Borchardt Malt Extract Co., Chicago (*Jour. A. M. A.*, June 23, 1917, p. 1911).

LIPIODINE-CIBA.—The ethyl ester of iodobrassicic acid containing 41 per cent. of iodine. Lipiodine-Ciba is odorless, tasteless, insoluble in water but very soluble in fatty oils. When administered, it is absorbed almost completely and excreted more slowly than inorganic iodids but more rapidly than with other iodized fats. It is said to be less likely to produce gastric irritation than ordinary iodids. It is supplied only in the form of Tablets Lipiodine-Ciba, 0.3 Gm. A. Klipstein and Company, New York (*Jour. A. M. A.*, June 30, 1917, p. 1985).

PROPAGANDA FOR REFORM

SOME MISBRANDED COUGH REMEDIES.—The following "cough remedies" have been declared misbranded under the U. S. Food and Drugs Act, chiefly because the curative claims made for them were found to be false and fraudulent: Barker's Remedy for Catarrh, Coughs, Colds and Rheumatism is essentially sugar and water with a small amount of cubebs, potassium iodid and creosote.—Mathieu's Cough Syrup, formerly called Syrup of Tar and Cod-Liver Oil, containing little, if any, tar and no cod-liver oil, but containing alcohol, chloroform, creosote and menthol.—Forrest's Juniper Tar, containing alcohol, petroleum and oil of tar.—Terraline Plain, found to be simply liquid petrolatum.—Tarraline with Heroin, found to be liquid petrolatum with heroin.—Classe's Cough Syrup, a syrup containing alcohol, glycerin, tolu and wild cherry, and having an odor of tar.—Essence Menthol-Laxene, containing alcohol, menthol, ammonium salts, chlorid, sugar, drug extract and an unidentified alkaloid.—Brown's Acacian Balsam, containing alcohol, acacia, nitrate, licorice, meconic acid, tartrates, reducing sugar, sodium and potassium compounds.—Sykes' Sure Cure for Catarrh, containing potassium chlorate, ammonium chlorid and small amounts of alcohol, hydrastin and methyl salicylate.—Warner's White Wine of Tar Syrup, containing opium and alcohol, no tar and but an insignificant amount of wine. Rawleigh's Golden Cough Syrup, containing alcohol, chloroform, menthol, guaiacon and perhaps horehound.—Rawleigh's Ru-Mex-Ol, containing 26.5 per cent. alcohol and vegetable matter in which rhubarb was indicated.—Gooch's Mexican Syrup of Wild Cherry, Tar, etc., containing morphin and alcohol, sugar, glycerin, methyl salicylate and benzaldehyde as flavor, and small amounts of tar and cherry (*Jour. A. M. A.*, June 16, 1917, p. 1863).

FLAVORED EPSOM SALT.—When a physician prescribes a dose of Epsom Salt to be taken in one of the official aromatic waters, he does not create a new invention. Yet the U. S. Patent Office has granted a patent for the "discovery" of a method for flavoring Epsom salt (*Jour. A. M. A.*, June 23, 1917, p. 1914).

THE CALCIUM CONTENT OF THE BLOOD.—It has been found that the calcium content of the blood plasma of cattle is remarkably constant, even when there is a continuous withdrawal as a result of pregnancy or lactation. It has also been found that there is no marked deviation from the normal in the calcium content of the blood serum of patients in the various stages of pulmonary tuberculosis. Even when a high milk diet was furnished over long periods, the calcium content of the blood was not increased above normal. Further, it was shown that the calcium content of the blood serum of normal human adults did not differ from that in sufferers from tuberculosis. Finally, it has been found that the calcium content of blood plasma differs little from the normal in advanced cases of uremia or in hemophilia or in purpura hemorrhagica (*Jour. A. M. A.*, June 23, 1917, p. 1915).

RUSSELL EMULSION AND RUSSELL PREPARED GREEN BONE.—The Council on Pharmacy and Chemistry reports that "The Russell Emulsion" and "The Russell Prepared Green Bone," put out by the Standard Emulsion Company, are inadmissible to New and Nonofficial Remedies. The Russell Emulsion is said to be composed of beef-fat, coconut, peanut and cottonseed oils, held in suspension by albumin. The mixture is called a "physiological" emulsion and is exploited on the theory that lime starvation is a main factor in tuberculosis and that large amounts of fat are required for the lime starved. There is no proof that tuberculosis is due to an insufficiency of lime in the tissues, and the claims made for the emulsion are grossly unwarranted. Particular attention is called to the exploitation of the emulsion by one Dr. Hague who talks before medical societies. The Russell Prepared Green Bone is said to be made by digesting chicken bones with hydrochloric acid and pepsin and adding glycerin at the end of the digestion. This is advertised as a lime food. The greater value of a few glasses of milk daily is not mentioned (*Jour. A. M. A.*, June 23, 1917, p. 1931).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been found misbranded under the U. S. Food and Drugs Act, chiefly because the curative claims made for them were unwarranted and untrue: Sterline's Asthma and Hay Fever Remedy is a water-alcohol solution containing potassium and sodium iodids, bromids and acetates, as well as some laxative substance.—Sterline's Bronchial Elixir, a solution of morphin, potassium citrate and aromatics in alcohol and water.—Lung-Vita, consisted essentially of a petroleum oil, saponifiable oil and a solution containing sugar and glycerin, with a small quantity of benzoic acid.—Arch Brand Nerve Tonic, a compound hypophosphite syrup.—Arch Brand Blood Remedy, containing 18 per cent. alcohol, sugar, potassium iodid, sarsaparilla and emodin-bearing drugs (*Jour. A. M. A.*, June 23, 1917, p. 1932).

BROM-I-PHOS.—The Council on Pharmacy and Chemistry reports that Brom-I-Phos (The National Drug Co.) is not eligible for admission to New and Nonofficial Remedies. The label declared the preparation to contain iodine, bromine and phosphorus in an aromatic base. The A. M. A. Chemical Laboratory found that Brom-I-Phos contained no free iodine, no free bromine and no elementary phosphorus; instead it appeared to be an alcoholic preparation containing iodid, bromid and a little phosphate. The Council rejected Brom-I-Phos because the statement of composition was unsatisfactory and misleading; because the therapeutic claims were exaggerated, and because the combination of bromine, iodine and phosphorus, or of bromid, iodid and phosphate is irrational (*Jour. A. M. A.*, June 30, 1917, p. 2001).

BOOK REVIEWS

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEYS. By Robert H. Greene, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M.D., Professor of Clinical Medicine, University and Bellevue Hospital Medical College. Fourth Edition. Thoroughly revised. Octavo of 666 pages, 301 illustrations. Cloth, \$5.50 net. Philadelphia and London: W. B. Saunders Company, 1917.

This work of Greene and Brooks is so well known that whatever favorable comment one may have to make about it would almost be superfluous. The demand for a fourth edition has enabled the authors to revise the book thoroughly and to incorporate therein all the newer developments, thus bringing the work fully up to date. They state that they have attempted to give the results of their "own experience and to avoid as far as possible speculative views." That is what makes the book of so much practical utility and real value to the student, the physician, the surgeon and the specialist.

IMPOTENCY, STERILITY, AND ARTIFICIAL IMPREGNATION. By Frank P. Davis, Ph.B., M.D., Fellow A. M. A., Ex-Secretary Oklahoma State Board of Medical Examiners; former Superintendent Oklahoma State Institution for Feeble-minded; formerly Editor and Publisher Davis' Magazine of Medicine, etc. Cloth, \$1.25. St. Louis, C. V. Mosby Company, 1917.

This is just another small book of about 130 pages dealing with some of the phases of the sexual. The author confesses that there already are many works on this subject, but insists that none that he has read have fulfilled his wants. If such a book fulfills his wants he is very easily satisfied. There seems to be really nothing new or of particular interest in this volume. The author believes that he has given a reasonable explanation of the cause of sexual excitation "by which the sexual mechanism is set in motion." One fails to see where the author has succeeded in doing so; and since that is apparently the main purpose of this book, one fails to see in it any merit or value whatsoever.

DISEASES OF THE STOMACH, INTESTINES AND PANCREAS. By Robert Coleman Kemp, M.D., Professor of Gastro-Intestinal Diseases at the Fordham University Medical School. Third Edition, revised and enlarged. Octavo of 1096 pages, with 438 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$7 net.

This author's work needs no introduction. It already has been reviewed in this JOURNAL on the occasion of the preceding editions. In the five years that have elapsed since the second revised edition appeared, very much progress has been made in the domain of gastro-enterology. Old ideas have changed and new ones have been formulated. The Roentgen ray has assumed a position of the foremost importance in this specialty. In order to incorporate all these changes and new developments this new edition is presented.

It would be superfluous to mention the many new features found in this new volume. Suffice it to say, that it is thoroughly up to date, and that it will continue to enjoy the reputation it already has as one of our best textbooks dealing with this subject.

THE MEDICAL CLINICS OF CHICAGO, Volume 2, No. 6, May, 1917. Index Number. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

A splendid clinic on "jaundice—its clinical interpretation," is given by Elliott. Smithies has a clinic on chronic enterocolitis associated with the presence of protozoa in the stools. Portis discusses carcinoma of the esophagus, and Williamson presents a case of hemopneumothorax. Beifeld gives a very instructive talk on pernicious anemia, Corbus on gonorrheal arthritis, Sidney Strauss on cardiac arrhythmia, Hamill on tabes dorsalis and Hamburger on heme-temesis. Mix presents a case of carcinoma of the hepatic flexure. Tice discusses syphilis of the lungs. Wright presents a case of acute nephritis following tonsillitis, and briefly discusses the estimation of kidney function. Abt and David C. Straus of the Michael Reese Hospital discuss "spontaneous pneumothorax due to emphysema."

Again, quite a variety of very interesting clinics by men who are specialists each in his own domain.

With this number these clinics cease as a separate publication, being merged with the Medical Clinics of North America. The new publication will appear bi-monthly and will be published by the same house.

A MANUAL OF PHYSICAL DIAGNOSIS. By Austin Flint, M.D., LL.D., Late Professor of the Principles and Practice of Medicine and of Clinical Medicine in Bellevue Hospital Medical College, etc. Seventh Edition, revised by Henry C. Thacher, M.S., M.D., Associate in Medicine in the College of Physicians and Surgeons of Columbia University; Assistant Attending Physician Roosevelt and Lincoln Hospitals, New York. Illustrated. Cloth, \$2.50. Lea & Febiger, Philadelphia and New York, 1917.

There are very few medical books better known than or as well known as this one. Flint's work on physical diagnosis has served in the past as one of the very best standard texts dealing with this subject. The new seventh edition, revised by Thacher, will help not only to maintain the reputation this classic already has, but to enhance its value to the profession and to increase its popularity.

That physicians in general are slighting the direct use of their "unaided senses" cannot be doubted. They seem to overlook the fact that physical examination continues to be the most important diagnostic measure available. The more attention one devotes to the study of physical diagnosis the greater will be his ability as a general diagnostician. To those who need and want a book on physical diagnosis that will give them what they want in the manner that only the expert can give, this book is recommended.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By Lewis A. Stimson, B.A., M.D., LL.D. (Yale), Professor of Surgery in Cornell University Medical College, New York; Consulting Surgeon to New York and Bellevue Hospitals; Corresponding Member of the Société de Chirurgie of Paris. Eighth Edition, revised and enlarged, with 475 illustrations and 39 plates in monotint. Cloth, \$6 net. Lea & Febiger, New York and Philadelphia, 1917.

A medical work that can boast of eight editions hardly needs comment. Certainly Stimson's work on fractures and dislocations needs no introduction. It is safe to say that there is hardly a regular physician or student who is not acquainted more or less with it.

In this revised edition the author has given everything new that he has noted in the interval since the last edition. The knowledge obtained by the experience in the present war has been incorporated.

The principal changes and additions, the author says, are to be found in that part of the book dealing with the treatment of fractures. In dislocations the largest addition is on the subject of dislocations of the shoulder in infancy, birth dislocations and the posterior subluxations. The large number of splendid illustrations is an especially noteworthy feature.

This new book will be not only "a safe guide," but a very valuable aid to the student, physician and surgeon.

DISEASES OF CHILDREN. A Manual for Students and Practitioners. By George M. Tuttle, M.D., Clinical Professor of Pediatrics, Washington University Medical School; Consulting Physician, St. Louis Children's Hospital; Attending Physician, St. Luke's Hospital; Consulting Pediatrician, St. Louis Maternity Hospital; and Phelps G. Hurford, M.D., Pediatrician St. Louis Lutheran Hospital; Assistant in Pediatrics, Washington University Medical School; Physician to Out-Patients' Pediatric Clinic of Washington University; Associate Physician, St. Louis Hospital for Infectious Diseases. Third Edition, thoroughly revised and enlarged. Illustrated with 47 engravings and 3 plates. Cloth, \$3.50. Lea & Febiger, Philadelphia and New York, 1917.

The third edition of this book will be welcomed as much and more than the preceding editions. This book has served a most useful purpose in the past, and the new edition, which brings the book fully up to date, will enhance its value and insure continued popularity for it.

The subject is given in concise and terse form. It gives the essence of what is known about pediatrics fully, yet very briefly, thus making this book just the sort that a great many physicians and students need and will want.

The special effort devoted to the illustrations is manifest by the number and quality of those contained in this new volume.

In presenting this new edition to the profession the authors have contributed a book that is bound to meet with wide general popularity and a very great demand.

EXPERIMENTAL PHARMACOLOGY. By Dennis E. Jackson, Ph.D., M.D., Associate Professor of Pharmacology, Washington University Medical School, St. Louis. With 390 original illustrations, including 24 full-page color plates. Cloth, \$4.00. St. Louis, C. V. Mosby Company, 1917.

As stated by the author, the teaching of pharmacology can be greatly facilitated and rendered much more effective and comprehensive if each student could have in his own hands a laboratory manual giving exact, specific, detailed directions for carrying out most of the experiments which he will be called on to perform in connection with his study of the subject. The need for such a manual has been abundantly met by the author who has presented in an excellent manner a book that should be in the hands of every student. It has been the author's aim to develop experimentally a knowledge of the general principles of pharmacologic reactions, and this he has done in an understandable manner. All of the more important drugs, and especially the poisonous

Parathyroids—
Powder and Tablets, 1-20 grain.
Red Bone Marrow—
(Medullary Glyceride) Hema-
togenetic, Histogenetic.
Corpus Luteum—(True Substance)
Powder, Tablets and 2 and 5
grain Capsules.



Elixir of Enzymes—
Digestant and palatable vehicle.
Pineal Substance—
Powder and Tablets, 1-20 grain.
Pituitary, Anterior—
Powder and Tablets, 2 grain.
Pituitary, Posterior—
Powder and Tablets, 1-10 grain.

Pituitary Liquid (Armour)

A pure, potent preparation of the Posterior Pituitary Body. Uniform and reliable alike in surgical and obstetrical work.

PITUITARY LIQUID (*Armour*) is entirely free from local anesthetics and other objectionable preservatives.*

PITUITARY LIQUID (*Armour*) standard strength, is supplied in two sized ampoules, 1 cc and $\frac{1}{2}$ cc, 6 in a box.

*Vide Hygienic Laboratory Bulletin No. 109.

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1489

alkaloids, are included in the experiments. An interesting chapter covering shop equipment and its uses has been added, as also a short chapter on photography. Particularly valuable will be the list of dealers in apparatus, tools, supplies, etc., as contained in the last six pages of the book.

The work is beautifully illustrated, both in colors and black and white. The book is of exceptional merit and should find a ready sale among teachers and students of pharmacology.

HANDBOOK OF SUGGESTIVE THERAPEUTICS, APPLIED HYPNOTISM, PSYCHIC SCIENCE. A Manual of Practical Psychotherapy, Designed Especially for the Practitioner of Medicine, Surgery and Dentistry. By Henry S. Munroe, M.D., Omaha, Neb. Fourth Edition, revised and enlarged. Cloth, \$5 net. St. Louis: C. V. Mosby Company, 1917.

Quite a few years have gone by since the last edition of this book was reviewed in the pages of this JOURNAL. In the meantime, considerable general interest has been aroused in the science dealing with psychic phenomena. The importance of suggestion and even hypnotism in the therapy of functional mental derangement is well recognized, and the value of applying these therapeutic measures whenever indicated is being appreciated more and more.

Good books dealing with this subject—books that can really be appreciated by physicians, students and all those interested in the study of this comparatively new science—are not numerous. As a matter of fact, good scientific books of value are rather scarce.

This book, then, fills a real need. It has enjoyed a wide popularity in the past, and the present edition

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will enjoy as much and no doubt much greater popularity. The book is intended for the great class of physicians and surgeons and dentists as well. It presents the practical as well as the scientific side of psychotherapy. That feature, probably more than any other, accounts for the general favor with which this work has been received. The favor it has enjoyed has been well merited, and the author may be assured that this new volume without doubt will be as fortunate as the others, and that it will continue to serve as it has in the past.

TRAUMATIC SURGERY. By John J. Moorhead, B.S., M.D., F.A.C.S., Adjunct Professor of Surgery, New York Post-Graduate Medical School and Hospital; Visiting Surgeon, Harlem Hospital; Attending Surgeon, Park Hospital; Adjunct Attending Surgeon, Post-Graduate Hospital; Chief Surgeon, Interborough Rapid Transit and New York Railways. Octavo Volume of 760 pages, with 522 original illustrations. Cloth, \$6.50 net. Philadelphia and London, W. B. Saunders Company, 1917.

This new work on "Traumatic Surgery" contains a great deal of information that ought to be had by every one who is called on to do such work. Compensation and other recent laws undoubtedly have caused physicians to focus their attention on this branch of medicine more so than in the past.

In this comprehensive book of 760 pages the author has attempted to give physicians just what they need. All of the various subjects, for example, wounds, contusions, shock, fractures, dislocations, joint injuries, deformities, foreign bodies, injuries of the various parts of the body, burns, heat stroke, frost-bite, injuries due to physical agents such as electricity, compressed air and illuminating gas injuries due to submersion, suffocation or smoke inhalation, injury in relation to abortion, appendicitis and visceral prolapse, all are discussed fully, yet in such manner that only the essentials are brought out. Chapters on the traumatic neuroses, on eye and ear tests and standards, on Roentgen rays and Roentgen-ray burns, and on medicolegal phases, is of especial value, as it contains information which often is badly needed but not easily—or not at all—found by the physician.

There is a distinct need for such a work at present. This new book fills the need in every particular. It ought to become immensely popular among students, physicians and surgeons.

EYE, EAR, NOSE AND THROAT. A Manual for Students and Practitioners. By Howard Charles Ballenger, M.D., Professor of Oto-Laryngology in Chicago Eye, Ear, Nose and Throat College; and A. G. Wipperfurth, M.D., Attending Oculist and Aurist, St. Elizabeth Hospital, Chicago, and Formerly Professor of Ophthalmology and Otology in Chicago Eye, Ear, Nose and Throat College. Second Edition. 525 pages. Cloth, \$3.50. Lea & Febiger, Philadelphia and New York, 1917.

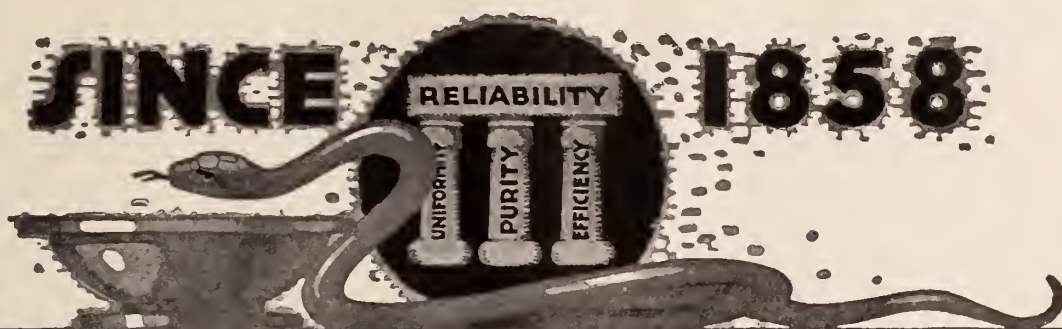
From the fact that this is the second edition, and that it has been thoroughly revised, it is evident that there is a demand for a work that presents affections of the eye, ear, nose and throat in one volume. The criticism that we would make is that it is quite im-

possible to cover all of the subjects, even sufficiently well for the student, in a volume of such limited size. Either the subjects must be treated in a very superficial manner, or if discussed in even a moderately adequate way, there must, of necessity, be some omissions. Thus, in this work, we find that such an important subject as diseases of the iris is dismissed with three pages of text, and all that is said about glaucoma in all of its phases is limited to six pages. The discussion of ear, nose and throat subjects is a little more comprehensive, and in every way is more valuable for the use of the student or general practitioner. It also has the advantage over the eye section in being more freely illustrated. In fact, the illustrations are excellent and elucidate the text in a manner very creditable to the author.

DIAGNOSIS FROM OCULAR SYMPTOMS. By Matthias Lanckton Foster, M.D., F.A.C.S., Member of the American Ophthalmological Society; Ophthalmic Surgeon to the New Rochelle Hospital; First Lieutenant in the Medical Reserve Corps, U. S. Army. 490 pages. Cloth bound, \$6.00. The Rebman Company, New York, 1917.

In this day and age when there is such a decided tendency to write medical books without there being any real reason for doing so, in fact when many of the books are mere compilations without an original thought or idea in them, it is refreshing to pick up a volume which has a real reason for its existence.

Instead of considering diseases in the stereotyped way the author gets away from the familiar descriptions and analyzes the symptoms that appertain to or appear in the eye, and, as he says, selects certain ones for points of departure and arranges the others into syndromes, showing how those which resemble each other differ, and how exclusion is to be made. The trouble with most descriptions of symptoms is that they are made to fit the general run of cases, and do not point out distinguishing characteristics which are of such great importance in differential diagnosis, or, in other words, in bringing about accuracy in diagnosis. In this work the author has analyzed the symptoms in a critical way and indicated their meaning. While he makes reference to the inestimable assistance furnished by pathologic, bacteriologic, and biologic research, he does not go into the details of the methods by which such help is obtained. Neither does he discuss the question of treatment, as that is outside of the scope of the work. In short, the book is of inestimable value to the physician who is really sincere and earnest in his desire to find out what is the matter with his patient. It is all well enough to say that a patient has an iritis, a conjunctivitis, or any other manifestations, but it is another thing to definitely locate the cause of these conditions, and it is the analysis of the symptoms and manifestations presented, which have been so admirably done by the author, which makes this book of great value to the physician who desires to do something more than make a bluff at a diagnosis and treat his patients empirically. The book will prove a valuable addition to the library of any physician, but it will be especially appreciated by the physician who is doing more or less eye work.



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CONTENTS

ORIGINAL ARTICLES	PAGE	EDITORIALS	PAGE
Conservative Treatment of Penetrating Wounds of the Eyeball. Albert E. Bulson, Jr., M.D., Fort Wayne, Ind.	307	The Problem of Unnecessary Operations and of Incompetent Surgeons	322
Leprosy in Indiana—Report of a Case. S. L. Egart, M.D., Indianapolis	312	Inadequate Compensation for Contract Surgical Work....	323
First Aid Work of the United States Bureau of Mines. Augustus F. Knoefel, M.D., Terre Haute, Ind.	314	Osteopaths in Government Service.....	323
A Review of Prescription Work. C. Norman Howard, M.D., Warsaw, Ind.	317	Safeguarding the Health of Our Troops.....	324
		Court Plaster	325
		Editorial Notes	325

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LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE II.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		MISCELLANEOUS	
	PAGE		PAGE
Muncie Academy of Medicine.....	335	Deaths	330
Delaware-Blackford	336	News Notes and Personals.....	330
		Correspondence	334
		The Truth About Medicines.....	336
		Book Reviews	338

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NUMBER 8

ORIGINAL ARTICLES

CONSERVATIVE TREATMENT OF PENETRATING WOUNDS OF THE EYEBALL *

DR. ALBERT E. BULSON, JR.

Fellow of the American College of Surgeons; Professor of
Ophthalmology in the Indiana University
School of Medicine

FORT WAYNE

A penetrating wound of the eyeball under any circumstances is a serious injury, and even when innocent appearing may result in disastrous inflammation requiring enucleation. The frequency with which iridocyclitis and panophthalmitis have followed these injuries has led many physicians to doubt the efficacy of preventive or palliative treatment, and to adopt the dernier resort of enucleation without giving more conservative treatment a chance to demonstrate its possible value. A recognition of this fact is the occasion for a plea for conservatism in the treatment of penetrating injuries of the eyeball.

A good rule to follow is the one that counts every injured eye as one possessing potential possibilities of being saved if proper treatment is adopted. In other words, every recently injured eyeball should be given the benefit of the doubt, and an effort made to save it unless through loss of so much of the intraocular contents the saving of either vision or globe is unquestionably hopeless. In this connection it should be noted that conservatism should not be carried to the extreme point where prolonged efforts are made to preserve a shrunken and sightless globe, as oftentimes, for cosmetic reasons alone, the removal of an injured eye

that will afford no sight and is disfiguring, is advisable.

Penetrating wounds of the eyeball may be divided into two general classes—simple penetrating wounds, and those accompanied by the lodgment of a foreign body within the globe.

Simple penetrating wounds may occur as a result of the eyeball being struck by any sharp or blunt object with sufficient force to penetrate all the outer tunics. Common injuries are those from knives, scissors, glass, limbs of shrubs or trees, hat pins, lead pencils, forks, wire, etc. The prognosis as to preservation of sight or even globe will depend in a great measure upon the site of the injury, the amount of intraocular contents lost, or injuries to the inner coats, and the presence or absence of infection which may cause destructive inflammation.

The penetrating wounds that are posterior to the ciliary region are comparatively inoffensive if small and unaccompanied by infection. The wound usually presents a small bead of vitreous which gradually disappears under the effects of cicatricial contraction, and protection may be afforded by stitching a conjunctival flap over the perforation. To inhibit infection it is my practice to touch the edges of the perforation with tincture of iodine before covering with the conjunctival flap, and the lacrimal sac is thoroughly flushed with normal salt solution.

The larger openings into the vitreous chamber, which are accompanied with more or less loss of vitreous, do not offer as favorable a prognosis, even in the absence of infection, for a shrunken globe is likely to result, with extensive intraocular degenerative changes. But even such wounds should be closed with fine catgut sutures providing not more than approximately 20 per cent. of the vitreous has been lost. Scleral sutures are not the easiest ones to place in a ruptured globe, and yet they may be placed with reasonable ease if the lids are

* Chairman's address before the eye, ear, nose and throat section of the Indiana State Medical Association at the Fort Wayne session, September, 1916.

held away from the globe with retractors so that no pressure on the eyeball interferes, and the edges of the sclera are delicately but firmly held with fine toothed forceps while the small half round sharp pointed needles are passed from within outward. Several stitches may be required, and each suture should be armed with two needles before beginning the work. For obvious reasons it is advisable to place the center stitch first, after which all other necessary stitches may be added. Due care should be observed to have the stitches in the scleral tissue only.

After the stitches are placed, the wound may be painted delicately with tincture of iodine, after which it should be covered with a conjunctival flap, the conjunctival stitches being placed well away from the scleral stitches. The subsequent treatment consists in absolute rest in bed, with iced compresses over the eyeball to aid in checking inflammation. Meddlesome inspection and dressings should be avoided. With the eyeball covered with bichloride ointment, which makes an ideal antiseptic dressing for all traumatic or surgical wounds of the eyeball, there is no occasion to disturb an injured eye that has been given appropriate attention.

If there has been extensive loss of vitreous, prompt enucleation should be recommended, for preservation of the eyeball under such circumstances means a shrunken globe, with detachment of the retina, extensive degenerative changes, and the possibility of chronic inflammatory disturbance through the effect of cicatricial changes.

The presence of active infection is not necessarily an indication for enucleation, for subconjunctival injections of cyanide of mercury have been known to check some severe intraocular infections. To be most effective the injections should be made early in the history of the trouble. The outcome may be in doubt for several days, but if the injury is a recent one, no particular risk is taken in awaiting the effect of heroic efforts to check the infective process.

Penetrating injuries of the anterior part of the globe, or through the cornea, are usually complicated by wounds of the iris, lens, and perhaps other parts of the eye. A wound of the cornea alone, if uncomplicated, is of particular concern only when it is in the visual center where the scar will seriously interfere with vision. An extensive wound may heal of itself, but one or more corneal stitches,

placed in a manner similar to that employed in placing scleral stitches, may facilitate not only prompt healing, but help to prevent complications from prolapse through delayed healing.

A perforating wound of the cornea may lacerate the iris, or merely allow the latter to prolapse. A lacerated iris usually is accompanied by hemorrhage which has a tendency to obscure the view and prevent inspection of deeper parts. No special treatment other than rest, iced compresses and atropine is required. A prolapse of iris usually calls for excision, followed by atropine or eserine according to the location of the injury.

If the lens is injured there may be marked swelling of the lens substance subsequent to the injury, causing glaucomatous symptoms, and necessitating prompt extraction. However, not infrequently a wounded lens is the occasion of no reaction, and even the development of a traumatic cataract is delayed or even fails to occur. If the wound is accompanied by extensive prolapse of iris, and dislocation of the lens, it is entirely probable that efforts to save the eyeball will fail. However, if the dislocated lens can be extracted without much loss of vitreous, and the prolapsed iris has been returned or abscised, there is no good reason for not attempting to save the eyeball.

Injuries involving the ciliary region are treacherous and exceedingly prone to cause serious intraocular inflammation of the injured eye, and with efforts to save the injured eye there are strong possibilities of a complicating sympathetic inflammation of the fellow eye. All attempts to save such eyeballs should, therefore, be governed by the extent and nature of the injury and the judgment of an experienced ophthalmic surgeon. However, here as elsewhere a reasonable amount of conservatism is justifiable, for wounds in the ciliary region or danger zone have been known to heal without the development of panophthalmitis or iridocyclitis. If the wound is large and the ciliary body is prolapsed or injured badly, enucleation is indicated, but if the wound is small, or the prolapse not extensive, a conjunctival flap may be drawn over the iodine-painted wound, the culdesac filled with bichloride ointment, and the results awaited. Generally the fate of the eye is foretold during the first week's treatment, and during that time there is little or no risk of sympathetic inflammation, though the eye should be subjected to the most critical inspection to note progress of the condition. The internal administration of calomel followed

by large doses of sodium salicylate very probably has a deterrent effect in the prevention of iridocyclitis and sympathetic inflammation, and the good results secured from subconjunctival injections of cyanide of mercury in aborting serious results from infection are now unquestioned. The latter treatment is deserving of more extended use in the severe intraocular infections.

Penetrating wounds of the eye accompanied by the lodgment of a foreign body within the globe usually cause severe inflammation and destruction of the eyeball as a result of iridocyclitis or panophthalmitis unless the foreign body is extracted promptly. The gravity of the accident depends upon the nature of the foreign body and the presence or absence of infection.

The diagnosis of a foreign body in the eyeball sometimes presents great difficulties, especially when blood in the vitreous and anterior chamber, or opacity of the lens, disturbs the transparency of the media, though usually is quite easy if the convex lens, the ophthalmoscope and radiographs are employed as aids. Skiagraphic examination has been perfected to such an extent that the presence and position of all metallic foreign bodies are readily revealed. When in the anterior chamber, extraction is relatively easy, though entanglement in the iris may require an iridectomy in order to secure the object. Iron or steel, unless non-magnetic, may be removed with the magnet, either through the wound of entry, which may be enlarged if necessary, or through an opening made opposite the location of the foreign body. Wood, stone, glass, copper, brass, lead, coal, etc., should be removed with fine forceps if possible. If in the vitreous chamber, extraction may offer more serious difficulties. An important point is to operate as soon as possible after the accident, or before the foreign body has become incarcerated in the tissues and covered with lymph.

Failure to secure a foreign body known to be within the globe should be followed by prompt enucleation. Even after successful extraction, the prognosis is always serious, for in a large proportion of cases infection will determine the fate of the eye. Less than one-third of the successful extractions result in preservation of the eyeball, though it is perhaps possible that more eyes would be saved if greater effort were put forth to abort or lessen the effects of infection. This can be accomplished by the use of subconjunctival injections, and the internal administration of calomel and

sodium salicylate as previously recommended in severe ocular infections.

While the danger of sympathetic inflammation following penetrating wounds of the eyeball is a real one and should not be minimized, yet it is questionable if many recently injured eyeballs are not sacrificed unnecessarily because of the fear of sympathetic trouble, and before any effort has been put forth to avoid the sacrifice. It is a well-known fact that oftentimes the eye recovers from a serious injury with preservation of exceptional vision. It, likewise, is known that some presumably hopelessly infected eyeballs have recovered under appropriate, though possibly heroic, treatment.

Therefore, it is reasonable to suppose that a very large per cent. of injured eyes should be given the benefit of the doubt, and enucleation postponed until the condition shows unmistakable evidence of being hopeless. There is a saying that "better be safe than sorry," and going on that theory, enucleation is performed altogether too often upon recently injured eyes. If the surgeon will remember that there is no case on record in which sympathetic inflammation has occurred in less than three weeks from the date of injury, he will recognize the comparative safety attending a delay of ten days or two weeks in arriving at a final decision to sacrifice the injured eyeball. The delay may be sufficient to bring an apparently hopelessly injured eye to a condition where success is assured.

The aids in promoting the best results may be summarized as follows:

- 1st. Application of tincture of iodine to edges of all wounds after they have been cleansed with sterile normal saline solution.

- 2d. Closure of all gaping wounds by sutures and covering the wound with a conjunctival flap.

- 3d. The use of bichloride salve in the cul-de-sac as an antiseptic dressing.

- 4th. The use of iced compresses and the internal administration of calomel followed by large doses of sodium salicylate as a preventive of inflammation.

- 5th. The use of subconjunctival injections of cyanide of mercury to abort or retard infection.

- 6th. Due consideration of the fact that sympathetic inflammation has not been known to occur in less than three weeks from the date of a penetrating injury, and that during that time efforts to save the eyeball are not only justified but attended with little or no risk.

DISCUSSION

DR. GEORGE F. KEIPER, LaFayette: The essayist has emphasized the prognosis in these cases as depending on the site of the wound, the amount of infection, the amount of damage done, the size of the wound and also the character of the wound, especially so as to whether the wound is in the center of the cornea and whether or not anything may be done to save damage to the central vision. It is surprising what we can do to save eyeballs and also vision by appropriate treatment and I wish to show some specimens I have obtained by removal of objects from the eye.

Several aids in treatment have been emphasized but I thoroughly believe in first cleansing the conjunctival flap with a sterile salt solution and then applying the iodine. I would emphasize the value of bringing the conjunctival flap down, as advocated by Funk, especially when the cornea has been injured. If the sclera has been injured there may not be much loss of the vitreous humor if the conjunctival flap is brought down and stitched in place. For doing this I use two needles in the place of one, and pass the stitch from within outward. If you use one needle there is apt to be a loss of much vitreous humor. It is then very important to bandage the eye and keep the eye closed.

In reference to the means of removing foreign bodies from the eye, of course it is a good procedure to use the magnet when indicated. However, when possible I resort to my own method without use of the magnet. I recall a recent extraction of a foreign body, after a half hour's effort, by bringing it out through the original wound of entrance. At first it looked impossible to get. In most instances I prefer the small magnet. In removing objects with the giant magnet we encounter a disadvantage as the patient must necessarily undergo extreme pain when holding the head up against the magnet, even though the eye has been thoroughly cocaineized. We put the man in the hospital, and in a few weeks the wound healed and now that is his better eye. It was a big wound and at first we thought the eye would need enucleation, but we held off and now we have the pleasure of not only having saved his eye but it is the better eye of the two.

I wish to emphasize also the danger of using cheap tools. So often people use cheap tools; a hatchet for a chisel, etc., and slivers of the cheap metal come off and enter the eye.

One patient was struck with two slivers of steel, one penetrating the eyeball. We did not save it. Inflammation set in and the eye went on to enucleation.

Sometimes a foreign body will penetrate the coats of the sclera without going through into

the vitreous chamber and we may be able to use the giant magnet or even use the giant forceps for the removal of the foreign body.

We can save 50 per cent. of the eyes that come to us; one half with some vision, and sometimes with a remarkable amount of vision. So resort to every possible means in order to save people's eyes, even though sightless. It is better than having a glass eye.

Another foreign body I removed from the eye of a negro man was the prong of a fork which was jabbed into his eye from above and penetrated the eyeball, passing down into the cheek and lay there some twenty years. When he came to me a violent inflammation had set in, affecting the eye and the antrum. The other eye was somewhat tender. I probed and finally came across something hard before the roentgen ray was taken. I was able to get it with a pair of forceps. We afterwards enucleated the injured eye.

I reported a case before the Indiana State Medical Association two years ago where a man had carried a piece of metal in his iris for twenty-eight years. Dr. J. L. Thompson had seen it at first and had advised to leave it alone. It had never troubled but once, and then we extracted the foreign body, leaving the iris intact. The eye has been quiet since.

DR. WILLIAM CAMPBELL POSEY, Philadelphia: I am very much interested in and wish to endorse practically all that Dr. Bulson has said. We are very fortunate in having a number of the members of the staff of specialists in ophthalmology present at Wills Eye Hospital every day so that we never make up our minds to enucleate an eye without first showing the case to the various members of the staff and asking them what they think of it. We are very much hampered, however, by so many of the eyes coming to us some days after the injury when the wound has already become foul. Dr. Bulson has done well to insist on the washing out of the lacrimal sac which aids in preventing the eye from becoming infected. We do not use the Haab magnet as a rule until after other magnets have failed. Bringing away large pieces of steel from the eye very often does damage, so we will, if we can, get it out through a scleral incision well away from ciliary body, iris and lens. Sympathetic ophthalmia is a dreaded disease, yet I have not seen many eyes lost from it. It springs up once in a while. A man who had been injured in the left eye by a foreign body, leaving a cyst of the iris at the point of entrance, had the foreign body taken from the eye while in another city. In about three weeks a low grade of inflammation set in in the other eye. As a result he has one-

sixtieth vision in the right eye, and he has some better vision in the left eye, both eyes showing marked inflammation of the ciliary body. The question is whether the removal of the healthy eye would do good. We do not think that it would, and we have not advocated the removal of the injured eye because it may be the patient will get actually better vision in the injured eye than in the sympathizing eye. We are giving this man salvarsan. Whether it will do any good we do not know.

DR. JOSEPH D. HEITGER, Bedford: There is just one thing that I would like to add in the way of after treatment. I would emphasize the value of fortifying the resistance of the tissues. After injuries of this character it is well known that certain biochemical changes take place. The use of sodium bicarbonate 40 grains, with 10 grains of sodium salicylate seems to fortify the tissues and prevent infection.

DR. GEORGE W. SPOHN, Elkhart: I would like to ask Dr. Posey a question. The essayist put special emphasis on the use of salicylates. I would like to ask if the hospitals in the East have had the same results and whether they are using salicylates internally and if so, with what success?

DR. WM. CAMPBELL POSEY, Philadelphia: We use the salicylates after Gifford's method. We think they do good. I am not quite sure in my mind that they limit the intensity of the inflammation and yet it seems that they do.

DR. GEORGE W. SPOHN, Elkhart: I have watched the articles in various journals and all through the literature generally, and it seems to be the rule to administer the salicylates from 10 to 60 to 80 grains per dose. I have tried it and I must confess that I have not secured good results. I have gotten my best results from bicarbonate of soda. The salicylates disturb the alimentary canal. If they affect the stomach they affect the rest of the system.

DR. ALBERT E. BULSON, JR., Fort Wayne (closing): It would have been possible for me to report the histories of a large number of cases of eyes injured by penetration and saved by conservative treatment, but I did not want to burden my paper with case histories. My object in the presentation of the paper was to make a plea for a more general observance of the rule that has been made by numerous experienced ophthalmologists which in effect is that every recently injured eye should be given the benefit of the doubt and a reasonable effort made to save it, unless, owing to the extent of the injury and loss of intraocular contents it is plainly evident that the eye has been lost. Many a severely injured eyeball, through conservative treatment, has been saved,

and oftentimes with considerable vision. Even a sightless eyeball, unless greatly disfiguring, is better than an artificial eye.

When we are called on to remove an eyeball we should adopt some measures to restore the cosmetic appearance, and there are several methods that improve on the simple enucleation. Evisceration, with the insertion of a gold or glass ball, has not proved to be entirely satisfactory, but I believe that the method advocated by Greenwood, of Boston, in which a very large glass ball is inserted in Tenon's capsule, is in every way unobjectionable and possesses many advantages in restoring the cosmetic appearance. I have practiced the Greenwood method in quite a large number of cases, and have been very well satisfied with it.

Sympathetic inflammation following eye injuries is a real danger and should be kept in mind, but, on the other hand, many physicians, in fear of sympathetic inflammation, have been really frightened into enucleating injured eyes too quickly. The point I make is that during the first ten days to two weeks after the injury efforts to save the eyeball are unattended with risk, and during that time the fate of the eye is foretold. If, at the end of two weeks, the injured eye does not show improvement as to tenderness, inflammation, and in the general character of the inflammatory process, I am ready to consider enucleation, but not before unless the injury has been so extensive that at the first inspection loss of the eyeball can be determined without question. I feel satisfied that sodium salicylate in large doses, according to the method of Gifford, and in combination with sodium bicarbonate, is very beneficial in sympathetic inflammation. I also am quite sure that sodium salicylate has a beneficial effect at any time during the course of the injury. I seldom have seen any difficulty in administering sodium salicylate if it is given in connection with large doses of water, or as recommended by Gifford.

I doubt whether any advantage arises through the enucleation of an exciting eye after sympathetic inflammation has started in the other eye. However, I do not think enucleation of an injured eye that from the nature of the injury indicates the possibility of being the cause of sympathetic inflammation in the fellow eye should be delayed if two or at the most three weeks of treatment has failed to bring about a decided improvement in the condition. This is especially true in penetrating injuries in the ciliary region. In short, penetrating wounds of the eyeball require conservative treatment as long as danger to the fellow eye is not threatened, but when danger to the fellow eye threatens enucleation should be prompt.

LEPROSY IN INDIANA—
REPORT OF A CASES. L. EGART, M.D.
INDIANAPOLIS

The case is interesting because now in quarantine at Fort Branch, because of its rather romantic history, and also because of the social and business economics that have resulted from it.

The patient has had a rather wide experience owing to his having traveled about a good deal, and he feels rather important on that account. He looks with contempt and disgust on his fellow townsmen for abhorring his condition. The daughter is quite smart in some respects, though very peculiar. The wife prefers to be absent from the room when visitors are present. It is said that at one time the family was pretentious and cleanly. Even at this time the wife and daughter were very much opposed to our taking the man's picture until he should have a chance to change clothes.

Fort Branch, which the patient has for years claimed as his home, and where he owns the little, neglected and dilapidated cottage in which he lives, is located on the C. & E. I. R. R. and has only a few hundred inhabitants. It also is reached by electric cars. The journey is about one hour by interurban from Evansville. The town is rather pretentious, but the streets are unpaved, and this made the auto ride from the depot to the cottage very interesting, for at one place it looked as if the machine would not pull through the mud and I am quite certain there was very little space between the axle and the mud. We found the health officer of the place very obliging. It was he who drove us to the edge of the village and, having left the automobile a little way off, went with us to arrange for us to see the patient.

The cottage is situated among a few others of better grade on the high bank of the railroad cut. The interurban also passes quite near. There is no fence separating the yards, but the nearest house is probably one hundred feet away, with a road between.

We did not see the innumerable cats which have been spoken of as residing within the sanctum, but the story fits the surroundings, for it looked as if nothing other than human beings would have had difficulty in procuring admission. On visitors the inmates certainly looked askance, but they finally consented to admit us. The patient sat with his hat on by the fire of

an old coal stove, which was begging for polish and for a little cleanly attention for itself and the few articles of furniture about the room. The room itself seemed to have been long neglected. It contained two windows on sides at right angles. Here, with his back to one and his side to the other, the patient sat with his face to the door and an old wooden bed at the right. A little table encumbered by many things of no value, including dirt, with two or three chairs, constituted the furniture. The floor was covered in the same manner as was the table. There was an old bureau in the corner between the windows. There were some shades at the windows, raised half way up, and during our visit, while I was trying to take a picture, the doctor attempted to raise the one behind the patient. When he found it would not raise, he gave the shade a jerk upwards in an effort to catch it above in the fastenings. When he did so there came down upon us a great cloud of dust which had been shaken by the agitation from a long resting place. It is quite possible there were some germs in the cloud also. The pictures were failures, but this may have been because the films were old.

The man was much pleased when I offered to shake hands with him and he delighted in telling how "the government doctor had not been afraid of him" and dilated on the ignorance of his fellow townsmen and the public in general in their attitude towards him. They were very ignorant in thinking his disease was contagious.

Patient looked to be about seventy years of age, though I am told he is very much younger, tall, slender and swarthy of appearance. His person is dirty and in keeping with his surroundings. There is nothing in his facial appearance to attract attention. His complexion is dusky, just the general appearance of the country man of the poorer class sitting around the winter fires smoking and chewing his tobacco. The hair is thin and unkempt or intractable, at least every hair appears at variance with its fellow. The back of the neck is almost or entirely devoid of hair to near the occipital protuberance, at which level the margin of the hair stretches almost straight across and the hairs extend almost straight out behind. Farther up they lie flat against the head, where they seem to have been pressed into shape by the weight of the hat. There is nothing else remarkable about the alopecia, and it might be taken for the alopecia of other causes. The skin of the sides of the face shows some change. It would not attract special attention, and if ex-

amined closely my impression is it would be more likely to be taken for some form of eczema. The voice is husky and peculiar. When he puts out his hand to shake hands one gets the impression of the rough hands of the farmer, but on turning the hand palm down, one gets an entirely different picture. The little finger on either hand is swollen and discolored, almost gangrenous, the fourth finger a little less so and the nails are horny and scaling off in small flakes. Back of each nail is a typical lesion, dry crusts, which appear to have a scaly formation with pus exuding from the crevices. The skin of the fingers is thick, dry and scaly, quite different from that of the little finger which is thin and translucent, showing the dead tissue beneath. The left foot is wrapped in a bandage, over which is a slipper. The right is encased in a slipper without stocking or other covering. There is nothing remarkable about the exposed parts.

Stripped of his clothing, the patient presents a copper colored, slightly thickened skin over the major part of his back and the extensor surfaces of his arms, with here and there a slightly depressed, atrophied, white area of skin, resembling leukoplakia. There was, some time ago, pain in the affected areas which has lately become less. He says he has no areas without sensation. The nails of the right foot are very similar to those of the fingers. The skin of the bottom of the foot is very much thickened and scaly. The knee jerk is not exaggerated, though the patient states that tapping on the side of the leg sends a thrill to his foot and toes. The foot does not show the sense of touch. This may be due to the thickness of the old scaly skin. Patient states he can feel the match a little when it touches the bottom of the foot. There is no ankle clonus. He says he has no difficulty in walking in the dark and can distinguish the nature of the surface over which he walks. Standing with eyes closed, the patient sways slightly. The appetite is good and the bowels are regular. There is the odor of suppuration about the patient, but, as some one remarked, in such surroundings as those in which the patient lives, it is impossible to identify odors. (At a later visit the odor was like that of the dissecting room cadaver.) Smears from the discharges from the lesions and from the nose showed lepra bacilli in abundance and many within the cells.

The patient is the son of a farmer and he says that thirty years ago while attending a horse for his father he contracted some disease in his nose which caused a bloody, watery discharge

which he claims was not benefited by any treatment. He thinks he contracted this nasal trouble from having to wash the horse and later picking at his nose. After some years there appeared on his arms and his legs, copper colored spots which the doctors pronounced to be lues and they treated him for that disease. A few years ago he was in Panama and slept in a certain room in a hotel for two and a half years where he was abundantly entertained during his wakeful moments by some very ferocious fleas and where his slumbers were disturbed by the machinations of a venerable old rat who was either remodeling the old hotel or building a new one in the attic above his bed. The patient says the fleas took their regular meals from him at night and got luncheon from the rat in the daytime. The patient at first stated that between the fleas and the rat, the disease had been carried to him from some low grade foreign workers. Later, from some of his remarks, it was impossible to determine whether he had not had the same manifestations of disease that he now has, and that he believed the disease may have been carried by the fleas and rat to other workers in the neighborhood. He was under the care of medical men of the army while there and later returned to the States and landed in a hospital in Indianapolis. Here an intern, fresh from his studies in the medical college and anxious to familiarize himself with all manner of germs, made and stained a smear of the discharge from the lesions. Finding the lepra bacillus, he reported to the authorities of the hospital and they confirmed the diagnosis. Then occurred a wild and romantic run. If the news spread abroad before the patient got away from the hospital it would be impossible to get any carrier to take him to his home, and if left in the hospital it would mean the absolute ruin of the hospital patronage. The patient was speedily placed in an automobile and as speedily driven to Fort Branch and deposited at his home. The news spread rapidly and soon the business of the town was demoralized. The United States government was appealed to in the hope that a mistake had been made, for the little town is powerless to move him from his present quarters and there is no place to take him if they could move him. The expert sent by the government confirmed the diagnosis, and the most rigid quarantine has been established. The little town must bear its burden till he dies or until Congress provides some means whereby he can be transported to some place where he can be taken care of without being a menace to commerce and a nuisance to the people.

FIRST AID WORK OF THE UNITED STATES BUREAU OF MINES

AUGUST F. KNOEFEL, M.D.

Consulting Surgeon, Bureau of Mines

TERRE HAUTE, IND.

"Safety and health for workers in the mineral industries and greater efficiency and the prevention of waste in preparing mineral resources — these are the aims of the Bureau of Mines and the purpose of the work it is doing. In the conduct of its investigations the Bureau's efforts are directed solely toward the advancement of the public good."

The above is the opening paragraph of the Fifth Annual Report of the Director of the Bureau of Mines. Nowadays one hears much of preparedness; this has been one of the most potent activities of the Bureau as evidenced above in which the Director states that "Safety and health for workers . . . are the aims of the Bureau of Mines." The great importance of mine-safety which was originally undertaken by the Geological Survey, and the wide-spread demand for a separate bureau or department to pursue these and other mining inquiries, resulted in Congress passing an act, effective July 1, 1910, which established the Bureau of Mines. J. A. Holmes was appointed Director of the new bureau by President Taft.

"In the six years since its establishment the Bureau has given chief attention, under the wording of appropriations made by Congress, to investigating the causes and methods of prevention of coal mine explosions and to safeguarding the lives of miners. In addition, coals and other mineral fuels belonging to or for the use of the Government of the United States have been analyzed and tested with a view to increasing efficiency in their utilization. Also, within the past three years investigations have been undertaken looking to greater safety and the prevention of waste in metal mining and miscellaneous mineral industries, and general examinations of several oil and gas fields of the country have been made with a view to eliminating or greatly reducing the large waste of natural gas in those fields. Finally, during the past two years preliminary organization for the purpose of investigating some of the urgent metallurgical problems has been effected."

It might be of interest to you to know that in the Joplin District, Missouri, an investigation made in cooperation with the Bureau of Public Health Service has revealed an excessively high

mortality from tuberculosis, and the importance of silicious dust in mine air as a causative agent. In consequence of the Bureau's work, active measures to abate dust and make conditions in and about the mines more healthful have been taken by state and local authorities, by mining companies and by miners.

There are maintained by the Bureau of Mines in the various mining localities of the United States, seven mine rescue stations, eight mine rescue cars and three mine rescue auto trucks. The engineers, foreman miners and first aid miners of the mine rescue stations and cars are engaged chiefly in investigating the causes of mine accidents, in rendering aid at mine disasters, in training miners in the use of mine rescue apparatus and first aid, and in giving first aid to the injured. The stations and cars are equipped with artificial breathing apparatus, resuscitating devices and first aid supplies. The personnel of the car are required to take a thorough course of training in first aid. During the relative short period during which the crews of the Bureau's cars and stations were able to conduct training throughout the year from July 1, 1914, to June 30, 1915, 60,124 miners visited the cars and stations, 53,612 attended lectures and safety demonstrations, 2,401 received mine-rescue training, and 6,176 were given first aid instruction. Of the number who took the first aid training, 2,705 received the First Aid Certificates of the Bureau. These certificates are issued to those who take the prescribed course of training and qualify for the same. Since the organization of the Bureau of Mines it has trained 35,000 miners in first aid.

The first aid work of the Bureau is under the direct supervision of Dr. W. A. Lynott, mine surgeon, and cooperating with him is the staff of consulting surgeons. This staff is composed of surgeons whose work has been chiefly in the mining industry. For the benefit of the miner, the Bureau has issued two publications on first aid: one an elementary and the other an advanced course.

First aid has been aptly described as the bridge between the scene of the accident and the hospital or injured party's home. In no other industry, nor under any other circumstances, is the question of transportation of an injured employee so vital a problem as in the case of an accident occurring in a mine. In nearly all cases the miner works many hundred feet from the place from whence he is hoisted out. In practically all other industries there is an abundance of illumination, but underground

the miner has to depend on the light given by the lamp he wears on his cap. Most of the large industrial plants employ a physician who is located on the grounds or directly in the plant, and it is only a question of but a few minutes for the doctor to reach the injured person or to bring him to the doctor. This is impossible in a mine, and it is for this reason that first aid has been and is being taught so thoroughly in the mining industry. It is the man at the "face," or in other words, the man who is employed at the place where accidents occur most frequently, who is being taught how to take care of himself or his fellow employee when either is injured. A good first aid man is a safety first man; first aid is the keystone of an arch linking safety on one side to efficiency on the other.

First aid to the injured is divided into two classes: First, that which should only be entrusted to the physician, and second, those procedures which may safely be carried out by the layman. It is on the latter that this paper dwells.

The course of first aid instruction embraces the treatment of wounds; how to control hemorrhage; the handling and dressing of fractures; the dressing of dislocations; methods of resuscitation after exposure to poisonous gases and contact with an electric circuit; treatment of shock, and methods of transporting an injured person.

In the treatment of wounds the first aid man is instructed never to wash a wound or apply any antiseptic, but to cover it with a sterile bandage compress. At the last meeting of the American Medical Association at Detroit the American First Aid Conference met. Among those present were representatives from manufacturing industries, railroads and the mining industry, and of the nineteen who spoke on the question of advising the first aid man to use an antiseptic, eighteen stated that in their opinion the treatment should be limited to the application of an aseptic dressing. The Bureau has endeavored to simplify all dressings and procedures as much as would be compatible with efficiency. For your convenience I have mounted on the board the various materials recommended by the Bureau for use in first aid work. The triangular bandage or Esmarch bandage is used exclusively, and it might be apropos to mention at this time, when the great conflict is being waged in Europe, that the Esmarch bandage was the child of necessity as it was brought out during the Franco-Prussian war. It is used in two forms, open or

unfolded and folded or cravat. It is used in holding dressings in place, tying on splints, as a tourniquet, and as a sling. The use of packages of gauze is discouraged for the reason that it is the common practice to open the package, remove its contents and cut off what is needed and then return the unused portion to the container; the result being that the entire amount has been soiled, and when used on the next case the liability of infection is greatly increased. To replace the above, the use of the bandage compress is recommended. This dressing is manufactured in three sizes and consists of a number of layers of gauze sewed to the center of a strip of bandage. They are sterilized in individual packages so that one can be used and leave the remainder sterile. The smallest size makes an admirable dressing for wounds of the finger. It consists of several thicknesses of gauze 1 inch square with muslin tails 1 yard long, the gauze being sewed to the center of the strip. The medium size is prepared similarly, its dimensions being $2\frac{1}{2}$ inches square sewed to center of a strip 1 yard long. The large bandage compress consists of about twenty thicknesses of gauze, $3\frac{1}{2}$ inches square, sewed to the center of a strip of bandage 2 yards long. Definite instructions are given as to the exact method of applying these dressings to wounds on any part of the body. For illustration, we will give the directions for dressing a wound of right breast: "Apply a bandage compress over the wound and tie firmly in place. Cover with triangular bandage as follows: Place the base diagonally across the chest, the upper end passing over the shoulder and down the back; tie the apex and lower end in center of back; tie the end coming over the shoulder at this place." The men are taught to handle the bandage compress by the tails, and that under no circumstances should that portion which touches the wound come in contact with anything else, also that they should not touch a wound or allow anything else to touch it except the bandage compress.

The matter of hemorrhage and its treatment is gone into with much detail. Every effort is made to impress on the men that in controlling hemorrhage, action must be swift and sure. They are told of the three kinds, capillary, venous and arterial. They understand oozing blood as capillary hemorrhage and control it by direct pressure over the wound with their bandage compress and triangular bandage. The same treatment is applied for venous hemorrhage if the flow is not too great. Where arterial hemorrhage is suspected, and with this

they associate bright red blood, spurting blood, etc., they are taught to apply digital pressure directly over the artery leading to the part affected until the tourniquet is applied. All the men who have taken this work can readily locate the brachial and femoral arteries. They are instructed to place a small pad over the vessel between the tourniquet and the limb.

The following is taken from *Miners Circular*: "For severe bleeding from any part of the arm, except the wrist, press the artery just on the inner side of the arm against the bone at a point just behind the inner border of the large muscle of the arm, that corresponds to the seam of the coat sleeve, apply a tourniquet, and cover the wound with a bandage compress. Place the forearm across the chest and hold in place with a triangular bandage. If the forearm is bleeding, cover it with a bandage compress and put some hard material about the size of a small egg well wrapped in gauze or cloth in the bend of the elbow and bend the forearm tightly against it, bandaging in this position by placing the middle of a cravat bandage on the outer side of the arm, passing twice around arm and forearm between elbow and wrist near the latter, and tying on the outside."

Fractures are divided into the two great classes, simple and compound. The dangers of a compound fracture are impressed on the first aider, also the likelihood of converting a simple into a compound. The wound in the skin which is associated with a compound fracture is covered with a sterile bandage compress. While the limb is supported by an assistant, splints are applied. These splints are usually made from the material found in a mine, as ties, bark off mine props and lumber. For padding, use is made of triangular bandages, clothing and canvas. The splints are tied on with triangular bandages or strips of canvas.

The following is the description of fracture of forearm in the *Miners Circular*: "Fracture of the forearm means breaking of either one or both bones leading from the elbow to the wrist. In applying a splint always have the patient's hand extended and his thumb pointing upward. The assistant should hold the bones on either side of the fracture. In treating a fracture of the forearm use two splints three or four inches wide, being long enough to extend from the bend of the elbow to the hand, so as to cover all but the last joints of the fingers. Pad the splints and place them in position. Use four cravat bandages to hold them in position. Place the center of the first cravat on the outer splint

as close to the elbow as possible; wrap the ends around the forearm two or three times and tie on the outer side; place the second cravat bandage in the center of the forearm and apply in the same manner. Place the third cravat over the outside splint, bring it around the wrist, cross the back of the hand, pass one end between thumb and forefinger and the other end around the little finger side, across palm, and around the hand between the thumb and forefinger, tie the two ends on the back of the hand. Use a cravat sling. In case of a compound fracture, first apply a bandage compress to the wound and tie the bandage firmly in place, then apply splints."

In directing dressing for dislocations the following is advised: "Do not attempt to reduce a dislocation . . . apply dressings or splints in the line of deformity." As dislocation of the shoulder joint is the most frequent of all, the description of the dressing for the same is given:

"Place the hand on the injured side over the center of the chest on a line with the shoulder, and hold in this position with a cravat sling. A large pad, made from a coat or jumper, should be placed under arm from the armpit to the elbow, so that the elbow will be held away from the side of the body. The center of a cravat bandage is then applied to the point of the elbow and carried around the body, the end in front being below the forearm and tied on the opposite side. Another cravat bandage, the center of which is placed below the pad, is passed over the forearm and around the back and tied on the opposite shoulder."

For the treatment of burns the use of picric acid gauze is recommended. Following an explosion in a mine it is not an uncommon occurrence to find men burned from the waist line up. The men usually work in their shirt or undershirt, these are consumed by the great heat; the trousers being of heavier material, protect the lower limbs. The gauze is held in place with the open triangular bandage.

A person overcome by exposure to poisonous gases is rolled over on his face, the mouth emptied of mucus, false teeth or other foreign body, the tongue pulled forward and the Shaeffer method of artificial respiration used as follows: "After the above has been done, the head is turned to one side resting on a forearm so that the mouth and nose will not come in contact with the ground, extend the other arm forward. Prepare a pad of folded clothing, blankets, or canvas and place it under lower part of chest. Do not make this pad too thick.

Do not wait to loosen patient's clothing, but begin artificial respiration without delay. An assistant may remove all tight clothing from the victim's neck, chest and waist. Blankets, hot water bottles, safety lamps or hot bricks well wrapped in paper or cloth should be placed about the person by an assistant.

Kneel straddling the person's thighs, and facing his head; rest the palms of your hands on his loins — on the muscles of the small of the back — with your thumbs nearly touching each other and your fingers spread over his lowest ribs; with arms held straight, swing forward slowly so that the weight of your body is gradually brought to bear on the person; then swing back slowly so as to remove pressure, but leave your hands in place. This should be done deliberately 16 to 18 times a minute.

Relative to the use of resuscitation devices, your attention is called to Technical Paper No. 77 of the Bureau of Mines, Report of the Committee on Resuscitation from Mine Gases. "This committee recommends in mild cases of respiratory failure, or even when breathing is suspended, manual methods should be used at once, because there is a chance of reviving the patient if resorted to immediately, but if, owing to delay, the cells of the brain have been deprived of their supply of oxygen for more than the critical period (rarely more than 10 minutes), it is utterly impossible for any later treatment to restore them to their normal condition."

The first aid treatment for a person who is unconscious from an electric shock is to begin artificial respiration at once.

The treatment for shock attendant on an injury is to place the person in a comfortable position with his head low, remove foreign bodies from mouth, wrap him up in clothing or blankets and apply external heat. If conscious, aromatic spirits ammonia is administered. The first aider is definitely instructed never to give an unconscious person anything to drink.

Various methods of transporting an injured person are taught. The first aid students are also shown how to improvise a stretcher out of drill bits, poles, pieces of pipe for handles and clothing, blankets or canvas for the bed.

The first and last instruction in the course is that they are first aiders and not doctors; that all their efforts are towards making the injured person comfortable; preventing infection; controlling hemorrhage; preventing additional injury incident to removal; that the patient's injuries when seen by the doctor, have not been aggravated by improper handling or treatment,

nor has anything been done which would interfere with the diagnosis of the case by him.

There are held annually in the mining localities of the United States not less than one hundred first aid contests in which the miners who have taken this work apply these dressings on supposedly injured persons. These teams are graded by doctors, using a regular list of discounts that have been formulated for these contests. On Sept. 4, 1916, there was held at Clinton, Indiana, the state championship meet, which is an annual affair. Twenty-nine teams of six men each were entered, and of that number, twenty-one received a general average of 90 or over. This is illustrative of the efficiency of the men who take this work. Next month there will be held the national meet at Detroit, at which time teams from mines throughout the United States will compete for the national championship.

In closing, I would submit the statement that it has been the universal report that wherever first aid has been adopted and practiced, accidents have decreased and the number of infected cases have decreased 50 per cent., one surgeon reports that since first aid was adopted at his plant, infected cases are uncommon, while previous to its adoption the reverse was the rule. First aid practiced rightfully and universally will be the greatest factor in cutting down the mortality rate of injuries occurring in industrial life.

A REVIEW OF PRESCRIPTION WORK *

C. NORMAN HOWARD, M.D.
WARSAW, IND.

Within broad lines we can differ from each other in the mechanics of an examination. It is, therefore, not so much that you or I should ride another's hobby, as that our own pet method should be ordered to a good conclusion.

A routine method in examinations is essential. A definite mode of procedure eliminates figuring out each time what to do next. Daily repetition makes each step automatic. It saves brain energy. With the mechanics subsidiary it leaves you free. It leaves you entirely alert to the findings themselves.

My thought is not to stamp any one routine with an indelible O. K. I claim no superiority

* Presented before the Eye, Ear, Nose and Throat Section of the Indiana State Medical Association at the Fort Wayne session, September, 1916.

for the following method. I expect to reshape it from time to time and the discussion which follows will be a factor in that.

A patient entering the outer door undergoes the following:

1. The girl at the desk starts his history with the name and address and history number.

2. When he reaches me I continue the history with the age, occupation and a brief account of the symptoms which have led him to believe his eyes need attention.

3. If glasses are now being worn, their strength, size, pupillary distance and character of frames are put down.

4. Test is then made for imbalance and for paralysis of the extrinsic muscles.

5. Inspection of iris, cornea, sclera and lids.

6. Tension estimated with the fingers.

7. Vision of each eye taken.

8. Patient returns to outer office to have "drops" instilled.

9. Ophthalmoscopic examination after the ciliary muscle is relaxed and the pupil dilated.

10. Retinoscopy.

11. Patient is given dark glasses; told not to make any near use of the eyes, and an hour set for his return two days later.

12. Two days later the subjective examination with the test types is made, and the findings added to the history.

13. Measurements are made for the frames.

14. The prescription is written in duplicate and the number of the prescription recorded on patient's history.

15. Prescription is mailed.

16. When the glasses reach me the carbon copy is referred to and the lenses checked with lens measure or through neutralization, or both.

17. If patient lives near he comes in and the glasses are tried on him. If he lives at a distance, the glasses are mailed by insured parcel post.

It has come about that in going through these various stages a great many times, certain positions for the patient and certain positions for myself, having naturally been most convenient, have become automatic. For instance, I know mechanically (if that is the proper expression) the position of the chair the patient will occupy next, the things I will ask him to do, the situation of the light, the position I will take whether sitting or standing, the instrument I will pick up and from where I will pick it.

Not until I came to write this paper, and particularly the last sentence, did I realize what a creature of habit I had become. However,

habit per se is not a thing for praise or blame; but rather the kind of habit—whether it makes for efficiency or otherwise. Therefore, one of the selfish reasons for the creation of this paper is to learn from you all in the discussion those things which will make for habits more worth while.

The ophthalmometer has not been mentioned. It is undoubtedly of value in recording the refraction of the cornea; but the retinoscopic findings include that with the refraction of the entire eye. So why bother with it?

Either homatropin (grain one to the dram), or 4 per cent. cocain, or 1 per cent. atropin is used in all refraction cases. The order of frequency is in the order given. Cocain is used in the eyes of old people. Atropin is very seldom used at all, but occasionally is found necessary in children. I have used atropin in refraction cases probably less than a dozen times in the last ten years.

The ophthalmoscope is not used as an additional means of determining the refractive error, but to discover whatever of pathology the eye may have to tell. Therefore, its use lessens the chances of saddling glasses without thought on patients who may have a retinitis, or a detachment of the retina, or an optic atrophy, or a hemorrhage or a cataract or whatever it may be.

The retinoscopic work is done at one-half meter, deducting 2.00 diopters from the findings—instead of at one meter with 1.00 diopter deduction. The preference has arisen largely from the greater ease of changing lenses at one-half meter distance.

The two examinations, two days apart, are made primarily to check off the objective with the subjective findings; and, indeed, occasionally a third one is made before the glasses are ordered. These examinations are also of value in learning to know the patient better. You get a clearer idea of his needs by seeing him twice than by seeing him once. You realize, for instance, more fully his occupational requirements—whether he is going to use his glasses on the farm or in the pulpit; in doing carpentering work or in driving an auto. Or at the eleventh hour one may come on something which will throw out the question of glasses entirely. For example, a man came complaining of headache which he took for granted originated in his eyes. Examination revealed an error of refraction, which I too thought was causing the headache. During the second examination a little closer questioning brought the nose under suspicion, and he was found to

have enlarged turbinates. His headache practically ceased after I operated on his nose, and I never did get the glasses for him.

Surely in the matter of headaches and disturbed vision we ought to have the sinuses and the nares in mind and be alive to the possibilities of more remote causes. Those who go into the general condition are certainly doing more for their patients than those who do not. In passing, I want to take off my hat to the men who can accomplish a satisfactory result in neurasthenics with weak ciliary muscles and irritable retinas.

In the last few years there has been an increasing tendency to use larger lenses and the deep periscopic and toric grinding. This tendency has appealed to me as making for eye betterment, and I have been glad to swim with the current. Punctals would seem to be theoretically better than torics. My experience with the former has been very limited as yet, and I shall appreciate some discussion as to the practical relative values. The leaf-shape lens would seem to be better than simply decentering.

I have still to be convinced as to the value of prisms for constant wear. Do they not simply make more dependent still a weakened extrinsic muscle? I average less than one prescription a year for prisms.

In looking over a dozen or more works on ophthalmology and optics I found frequent statements of the greater proportion of hyperopia to any other error of refraction. I did not find, however, any tabulated list showing more definitely the percentage of occurrence of the different varieties of ametropia. Perhaps I overlooked it. As a matter of statistical interest I have gone over my prescriptions, weeding out all those in which only one lens was ordered; or in which the type of error was different in the two eyes; or in which the correction was for presbyopia. Omitting then these three groups, I used a thousand prescriptions for getting percentages as to the frequency of occurrence of the various forms of ametropia. It turned out as follows, putting them in the order of lesser to great frequency:

	Per Cent.
1. Myopia	2
2. Compound myopic astigmatism....	4
3. Mixed astigmatism.....	5
4. Myopic astigmatism.....	10
5. Hyperopia	23
6. Hyperopic astigmatism.....	26
7. Compound hyperopic astigmatism..	30
	—
	100

While a thousand prescriptions would not be conclusive, it was interesting to me to find that they placed compound hyperopic astigmatism as the most common error of refraction.

You will remember that in obtaining the prescriptions for the above tabulation, I threw out those in which the type of error was different in both eyes. This number turned out to be 265, which would mean that out of 1,265 between one-fifth and one-fourth showed different types of error in the same patient.

Included in the original tabulation were those in which the actual strength of the two lenses was different, although the type was the same. Of these, the right lens was the stronger in 204 prescriptions, and the left stronger in 165, making a total of 369 out of the thousand. This would leave 631 in which both eyes accepted exactly the same strength of lens.

DISCUSSION

DR. JOHN R. NEWCOMB, Indianapolis: There is very little left to discuss in the way of routine office work, but there are a few points I would like to speak of. The doctor said that when a patient comes into his office his secretary starts the history sheet with the name and address and history number, and then the doctor proceeds with the history. Now it strikes me that that is an awful waste of time for the doctor. You can train your assistant to get a history far better than you can do it. She has more time and she can be taught what to look out for. She can draw out from the patient information of any incipient trouble, and my plan has been that I do not see a patient until the history is completed. The young lady brings the history in to me, I read it over and tell her what to do. When my patient is ready for an examination, with the ciliary muscle fully relaxed, I see my patient for the first time. That saves at least ten minutes. My only criticism is the waste of time by failure to train the assistant to take a complete history.

I believe it is another waste of time to have a patient come back two days later to complete the test. It is not necessary and your patient does not like it.

For the last six years I have used miotics following examinations. Use a definite amount of eserine solution which is so powerful that within twenty minutes or half an hour the patient can read, go back to work, or go out on the street comfortably; besides, you have saved two days' time.

As to using cocaine in elderly patients, I have given up cocaine and use euphthalmin. It gives a beautiful dilatation and absolutely no raise in tension at all. You have considerably less

trouble with euphthalmin than you have with the cocain. I use no atropin at all. Last spring in Philadelphia I saw them using scopolamin-cocain solution, and now I use it exclusively in children. If you send a patient home at night with a bottle of atropin you need not be surprised if you have trouble, and for that reason I am afraid to use it.

There is one other point I wish to bring out in the routine examination. It is not doing myself nor the patient justice if the history of the patient shows headache and we do not locate the cause. The headache may be due to a nasal disturbance or it may be due to the eyes. You can measure your blind spots with your perimeter within a half minute's time. If the headache is due to a nasal disturbance you are not going to have an enlarged blind spot. Within a short time, by use of the perimeter, you can take your fields and eliminate a number of other conditions that might come up. It is the most valuable thing I have. I use it with every patient. Measure the blind spots and you have eliminated a lot of trouble.

As to the value of punctal lenses, the essayist's receptive attitude is well taken. The punctal lens in high power glass offers advantages. I have tried them myself and I do not believe the punctal lens is advisable except where we have high degrees of error. I think we would all do well to go slow on punctal lenses, however, until we have punctal trial cases.

On the percentage of errors of refraction, my experience has been practically the same as Dr. Howard's, except I have had more astigmatism than he has experienced.

System we all need, and a better financial system too. It is absolutely pitiful when you see the average doctor's method of keeping books. A paper next year on the subject would probably be very timely.

DR. GEORGE F. KEIPER, Lafayette: The refraction work of the ophthalmologist comprises a very large part of his practice and a very profitable one, and because of that fact it deserves consideration. I believe every means ought to be used in order to make the most careful examination of the eye, because we are simply examining the large portion of the central nervous system. We must remember that. We must learn to look clear through a patient, from the tip of the toe to the crown of the head. I wish to commend what Dr. Newcomb has brought out in the use of miotics. Many patients say they want you to make a careful examination, while others come possibly from another town and are in haste to get back. No examination should be made under cycloplegia without the subsequent use of a miotic; this should be an established routine procedure. Protect the patient after the examination has

been made. Scopolamin has been used by me, but scopolamin is nothing more or less than impure atropin. We might just as well use the pure stuff. Atropin is indicated in some cases. We could not do all the work with homatropin.

As to the question about system, if a careful examination of the eyes is made for the estimation of refraction there are one hundred and fifty points to be gone over. No man can remember all those things every time and attempt to rely on his memory alone. We should have a printed blank with spaces to be filled in so that we will see everything and omit nothing.

DR. JOSEPH D. HEITGER, Bedford: In regard to the use of cocain in dilating the pupil in older people, it has been used with limited success, but some experimental work done by Dr. Meyer Wiener of St. Louis a few years ago, led to the discovery of dextro-hyoscin for this purpose. It has been highly recommended by Dr. Wiener in his experiments and seems to be the best mydriatic that we have.

In regard to the value of the blind spot, I would recommend that a blind spot determination be done on all eye cases, and in addition follow the same procedure in nasal cases. The blind spot can be taken by any intelligent person by the use of the perimeter. It is little more than turning on and off a light in a dark room.

The only value I can see in using prisms is in correcting the vertical error. The prism gives relief in cases of vertical error.

DR. ALBERT E. BULSON, JR., Fort Wayne: I want to agree with what Dr. Newcomb says concerning the waste of time on details. The busy ophthalmologist has no more right to look after details than the busy business man. It is absurd for a good doctor to waste as much time as the ordinary doctor does on details that can be turned over to a ten to fifteen dollar a week girl. Like Dr. Newcomb I make a practice of having the history taken by a trained assistant. I do not do as he does, not see the case until after the cycloplegic has been used, because an assistant cannot always recognize a beginning simple glaucoma. After the state of the vision, the muscles and the manifest error has been determined by an assistant, I make a hasty examination of the case, including palpation and an ophthalmoscopic examination of the disk for the purpose of excluding simple glaucoma. The case is then turned over to an attendant for the application of the cycloplegic. A well trained assistant does the retinoscopy, but later I personally check up all the findings.

I cannot endorse the statement made that scopolamin is nothing but a poor grade of atropin. Scopolamin is a pure alkaloid. If Dr.

Keiper has not seen cases go wrong by the use of homatropin he has something coming to him, for I have. Not long ago I had a patient, 7 or 8 years of age, who a short time after leaving my office showed a mental disturbance which I quickly traced to the cycloplegic I had used in determining the state of the refraction. A drop of eserine and a night's sleep was all that was required to bring about a normal condition. I don't think it wise to permit adult patients to go out of the office without the use of a drop of eserine. I am afraid of the consequences. A paper presented at the Detroit Session of the A. M. A. pointed out the danger of that practice. As was pointed out there, glaucoma is sometimes produced by the use of a cycloplegic and that is exactly why I think that the eyes should be examined carefully before a cycloplegic is employed. There is a difference between a cycloplegic and a mydriatic.

I agree with Dr. Newcomb that there is an advantage in using euphthalmin, the effects of which are evanescent. Euphthalmin is by all means the safest thing to use as a mydriatic, but it is not a cycloplegic.

The average ophthalmologist is altogether too careless with his refraction work. He is not thorough enough. He does not study his cases as he should. No patient should be sent out of the office without a thorough ophthalmological examination unless the examiner desires to run the risk of overlooking pathological conditions which should not escape detection at the hands of any doctor who desires to be known as competent and thorough.

I have not seen very much benefit from prisms. The essayist's point is well taken when he says that with prisms we are only attempting to bolster up a crippled muscle, and what little reserve power the muscle has left is not given a chance to develop. So many of these cases of imbalance of the muscles disappear after the error of refraction is properly corrected. Wait until you have seen the effect of your glasses. In many of these neurasthenic patients the trouble is due to some anomalous condition in the nose.

In regard to the punctal lenses, again I wish to say that their use should be confined to those cases with high refractive errors. I do think a great deal of care should be taken in the measurement of frames to give the best cosmetic effect. It is wise to try to prescribe glasses that are becoming. Also be careful about the pupillary distance. But here again the details of frame adjustment may be left to an assistant. I don't do a thing toward adjustment of glasses in my office. I think many physicians are wasting time on details that can be even better taken care of by a paid assistant. When it comes down to saying what shall be done and when it

shall be done, that is a different thing. An intelligent office girl can be trained to put drops in an eye, and few patients will object, but patients pay the doctor for the knowledge of what, how and when drops shall be instilled. Many doctors are wearing themselves out doing detail work. They should reserve their physical and mental power for something more important.

DR. GEORGE W. SPOHN, Elkhart: I would like to ask how many here are using cycloplegic? How many are depending on the fogging method as the jewelers do? How many are using atropin today in astigmatic cases? How many are depending on homatropin for cycloplegia? I am speaking concerning the majority of the cases we see. With children I use atropin and with adults I use homatropin. In adults, how many use cocaine? One time I heard about twenty-five eye men in Chicago discuss the question of time allotted to patients, and the general conclusion was that five to ten minutes to a case was sufficient. One man said he did not give on an average more than five minutes to a patient. I have never gotten through like that. How many spend thirty minutes? How many an hour? Twenty-five men in Chicago, doing nothing but ophthalmological work, take only five to ten minutes for a patient. I told them I could not take my history in that time, let alone the other work. I have kept track of three hundred cases, and I have spent no less than thirty minutes on an average on each patient. I am not so quick as some others. I have been benefited by this discussion and glad to know what you folks have been doing. As to the history of these cases, some physicians are not keeping a record of their work at all, and when a patient returns the physician has no record of the previous work done for them. Is there any physician here who does not keep a record of his cases? I keep a record of all my cases and perhaps every physician does in the state of Indiana. As Dr. Howard said, there is a great deal of routine work. A few years ago when the idea of keeping case records was first brought up in a section of the American Medical Association almost everybody opposed it. Today it is wonderful in its results and what we have gotten out of it. We have so much satisfaction from it ourselves, and the patients are so much better pleased. And here let me say, we must please our patients, for we have to compete with the jeweler and the fellows down on the corner, and it is not an easy task. We must educate the public that it is not a question of fitting glasses with them, but a question of the examination of the eyes.

NOTE.—Dr. Howard being ill, his paper was read by Dr. Spohn. Dr. Howard, therefore, was not present to close the discussion.

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EDITORIALS

THE PROBLEM OF UNNECESSARY
OPERATIONS AND OF INCOM-
PETENT SURGEONS

Dr. Arthur Dean Bevan, president-elect of the American Medical Association, has a very interesting paper in the *Jour. A. M. A.* of July 21 on the problem of bad surgical therapy, of unnecessary operations, and of incompetent surgeons, and he contends that it is a problem that faces the American medical profession and that it is one that should be investigated by the organized medical profession of the entire country through a council or committee best suited to do the work. He believes that the problem should be attacked without any sensationalism, certainly without any unnecessary publicity, and should be looked on as a piece of house cleaning that should be done by the American Medical Association.

Dr. Bevan asserts that no inconsiderable number of operations are being performed in this country that are unnecessary and unwarranted, and also that there is a considerable number of men operating who are not qualified to do the work. He thinks the condition is due to three causes—ignorance, dishonesty, and bad judgment; sometimes bad judgment amounting almost to obsession. He says, "What shall be done by the medical profession about the unnecessary and unwarranted surgical operations done as a result of ignorance in unattached and uncontrolled hospitals by poorly trained men?" He also says, "What shall be done about the unnecessary operations done by dishonest men for a fee?"

We might answer the first question by saying that there should be some general, recognized standard of fitness for the practice of surgery in any of its branches, and the man who essays

to do surgical work should be qualified by complying with definite educational requirements and a suitable period of hospital experience and adequate training under competent surgeons. In this day and age when so much is accomplished by good surgical work many doctors have an overwhelming desire to branch out as surgeons, and but a limited number of these men take the time to properly fit themselves for the work they hold themselves out to do. In consequence unnecessary, unwarranted, and very badly performed surgical operations are of common occurrence.

But there is another side to the story which Dr. Bevan has failed to touch on, and which bears directly on the second question, and that is the one which relates to commercialism or the abominable practice of fee-splitting as a cause of unnecessary and unwarranted operations, even at the hands of men of recognized ability and excellent training. The fee-splitting surgeon does not live who can follow the dictates of his own conscience—if he has a conscience—and continue to get cases from all of those to whom he caters by offering a division of fees in order to secure their surgical work. His competency is not to be trusted when his judgment is so influenced by a reprehensible commercial trait.

The American Medical Association can investigate and pass resolutions from now until doom's day and never solve the problem discussed by Dr. Bevan, for just as long as the public is willing to tolerate the faults under discussion, just so long will this problem remain unsolved. Slowly but none the less surely the public is beginning to awaken to the necessity of protecting itself; and the time will come when the public will know in a very definite way whether a surgeon has the requisite amount of education and training entitling him to pose as a surgeon; and the time will come when the public also will have something to say about the morals of surgeons. When that time comes, the disgraceful traffic in the ills of humanity will cease. Dr. Bevan might well have concluded his paper by admitting that one of the ways to clean house in the medical profession is to take the public—the one suffering most—into our confidence and enlist the public's assistance in solving the problem to which he has called attention.

INADEQUATE COMPENSATION FOR CONTRACT SURGICAL WORK

It is passing strange that some doctors are not able to pass over the temptation to accept a pass or insignificant remuneration for services rendered railroad companies or corporations employing large numbers of laboring men. For every one dollar in value attached to the pass or similar remuneration these shrewd corporations obtain from twenty-five to one hundred dollars' worth of medical and surgical services. Of course the doctor who does this contract work on such ridiculous terms generally has in view the extension of his private practice among the employees of the corporation which he serves, but if every doctor who accepts contract practice will analyze the returns he will find that contract practice of the kind described does not pay, and usually hurts rather than benefits.

One of the JOURNAL's readers says that he felt flattered in being offered the position of surgeon for one of the railroad companies operating in Indiana, and accepted the appointment on the understanding that he was to receive an annual pass over the lines of the railroad and a yearly salary of \$100. At the end of the first year he found that his pass had netted him \$5.60, which amount represented the prevailing rate for the year's amount of travel he had done over the railroad for which he was acting as surgeon, and he had increased his private practice among the employees of the railroad company to the extent of approximately \$200, liberally estimated. His income from the position, coming directly or indirectly, therefore amounted to \$305.60. For that remuneration he had rendered services for the railroad company which, even at very moderate charges, would amount to over \$2,000, and in addition he contributed much valuable time in complying with the exacting requirements of the railroad company in filling out long and comprehensive reports and in appearing as a witness before various courts. Not a few of the employees for whom he had rendered services had, as they usually do when granted gratuitous services, become "knockers" rather than "boosters." The final analysis, therefore, showed that about \$1,700 worth of exacting professional work had been donated to a wealthy corporation having no scruples nor sentiment and as able to pay for the services rendered by medical men as they are able to pay for the daily labor of the section hand or the skilled services of the superintendent of a

division. This experience is the experience of practically every doctor who accepts an appointment as surgeon for a corporation, the only exception being the one where the doctor devotes his entire time to his position on a straight living salary.

There is no reason why the surgeon for a railroad or other corporation employing large numbers of men should not be considered on the same plane as other employees, and the services, which necessarily are skilled services, be paid for the same as pay is given for other skilled services. The annual pass should not enter into the transaction at all, any more than it enters into the compensation awarded trainmen or other officers. At best the pass is worth only what actual railroad fare would amount to in the course of a year, and generally that is but a few dollars if the doctor is paying attention to business instead of traveling up and down the railroad for which he is working in order to get something out of his pass.

The sooner medical men begin to analyze the returns for the services they render the sooner will they realize that they are buying "gold bricks" when they accept appointments as surgeons for railroad companies and other corporations when the remuneration attached to such appointments is insignificant.

OSTEOPATHS IN GOVERNMENT SERVICE

The osteopaths are quite jubilant over the fact that the Government has admitted them to service with the armies, and certain newspapers are commenting on this in a tone that would indicate that they have been laboring under the delusion that the osteopaths have been kept from the service because they are osteopaths. As a matter of fact the Government ruling provides that the osteopaths must have had a four-year course of training, and the course of training prescribed is exactly the same as the training given the regular physician. Therefore, we fail to see why the osteopaths should be so jubilant, for, as has been claimed by members of the regular medical profession from the beginning of this controversy over medical education, it matters not by what name doctors gain admission to the medical ranks providing they have adequate training.

The objection to the whole horde of medical pretenders and incompetents has been that they have tried to secure permission to practice med-

icine and surgery after but a few weeks or months of study and training, and usually without any premedical education worth mentioning. An osteopath, a chiropractor, a napropath, a neuropath, or a member of any other sect may become just as good a physician as a member of the regular medical profession, and just as much entitled to licensure, *providing he obtains the necessary education and training*, but when he receives the education and training required there is no longer a necessity for classifying him with a sect that believes only in some particular form of practice that has but a limited field of usefulness.

Permit those who are identified with the various pseudomedical sects to participate in Government service, or to practice where they please, but make them comply with requirements that are a guarantee of competency, and have the same requirements for every applicant to practice medicine, no matter under what sect he claims allegiance.

SAFEGUARDING THE HEALTH OF OUR TROOPS

If there is any one point with reference to which the American people may be reassured it is that the health of their Army will be carefully looked after and thoroughly safeguarded throughout the course of this war. The medical personnel of the Army realizes the responsibility that rests on it in preventing the origin and spread of preventable diseases in the Army. Our lesson has been learned from the occurrence of epidemics not only in past wars but in the present war as well. It is being realized more and more the world over that only an army that is free from disease can be depended on to conduct a successful campaign. The instances of campaigns that have failed because of epidemics breaking out in the armies of belligerents are too numerous to mention. Our own experience in the Spanish war is still vividly remembered by many of us.

The prevention and control of preventable diseases in our Army has thus become the most important problem for our army medical officers. Everywhere the greatest attention is being paid to the subject of sanitation. Military hygiene is one of the subjects taught the student medical officers in the training camps for medi-

cal officers, and all medical officers—whether they will be sanitarians or not—must take this course. Those who will not be sanitarians in the service will know at least enough to instruct line officers and enlisted men in this most important subject. Those who may become sanitarians in the service are given the opportunity of learning at first hand the duties of such an officer by making sanitary inspection visits with a competent sanitary officer whose duty it is to conduct such inspection. Every opportunity is taken to make the physician entering the Army realize how necessary it is from a military standpoint to safeguard the health of the troops, and how important it is for him to cooperate successfully with that end in view.

Hygiene is taught to every man entering the Army. Each one is taught the essentials of hygiene that he must know in order to preserve his own health and that of his fellows. They are made to see that an "ounce of prevention is worth a ton of cure," that it is easier to prevent disease than to check or cure it after it has once set in. This idea of impressing every one in the Army with the great importance of personal hygiene, and the strict enforcement of orders relating thereto cannot but help considerably in keeping our troops in a very good state of health.

The constant vigilance of the sanitary officers of the Army is without doubt the most important factor in the prevention of disease in the Army. It is true that every soldier is inoculated against smallpox, typhoid and paratyphoid fevers. However, the successful prevention of epidemics in an army depends on more than that. The possible sources of infection of the usual epidemics ravaging armies must be eliminated before their danger causes disaster. Therefore, in the Army the strictest attention is paid to those famous "f's," namely, food, flies, feces. The Army sanitarian watches these three items very thoroughly. If he is efficient he will insure to his troops pure food and good water; he will make his district fly-proof, and he will dispose of the excreta of both men and animals in the proper manner.

It thus can be seen that the path of the Army officer is no "bed of roses." He has plenty to do, and his work is of paramount importance. On him is dependent to a large extent the health of the Army, and certainly the success or failure

of the Army is dependent to a very large extent on its health. The country is depending on its doctors to "make good." There is not the slightest doubt but that they will. The doctors will do their part in safeguarding the health of the Army, and will follow the soldiers right up the line to give them all the care and aid the latter will need during this great crisis.

COURT PLASTER

From time to time public apprehension is aroused concerning things about which there previously was no suspicion.

The present uneasiness concerning German spies has made people fear everything of uncertain origin. The sale of court plaster as a blind by crooked beggars has been a common practice for years on the streets of many large cities in the United States of America. Enormous quantities of this stuff have been sold without any suspicion by the buyers that putting the dirty sticky cloth on a clean wound was a dangerous practice. In manufacturing court plaster no measures are taken to make it aseptic, and no effort is made to keep it clean while it is on sale.

The tetanus bacillus is a normal inhabitant of the horses' digestive tract, and it is, therefore, a common bacillus in horse manure and the dust blown about the city streets, so that any exposure of an adhesive surface on a windy street will catch a large number of bacteria, some of which may be tetanus bacilli.

Bacteriologic examination of a large number of samples of court plaster by the bacteriologic department of the Indiana State Board of Health shows them to contain many bacteria, mostly hay bacilli, also some molds and yeasts. Now if this septic court plaster is applied to a clean wound, pus will form, and the plaster forming an impervious covering, the wound will tend to become anaerobic, thus favoring the growth of the tetanus bacillus which is an anaerobic, spore bearing bacillus.

Court plaster is a relic of the days of laudable pus and listerism, when it was believed that air and not dirty fingers or dirty dressings was the common source of infected wounds. People should be taught that it is better to leave a wound exposed to the air than to cover it with a dirty covering, and more particularly an infected impervious material like court plaster.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

IF all of the Indiana physicians who are talking about going to war really get into Uncle Sam's service there will not be enough doctors left in the Hoosier state to take care of an ordinary boil. However, the test of the proposition is in real enlistment, and the records from Indiana seem to show that we are a little shy on medical recruits.

THE chiropractors are half-heartedly asking the war department if they can be of any service in the present war. Foolish question! Of course the chiropractors can be of service, for there is a crying need for men in the trenches, and that is about the only place we know of where they can be of any use, and we presume that the war department will so advise them.

DOCTORS who are entering war service should read their life insurance policies and determine the exemptions, or, better still, write life insurance companies in which they are insured and ask for information concerning war service and its effect on life insurance that was in force before the beginning of the war. This is a very important matter, and should be attended to at once by those who have not already taken such precautions.

THIS is vacation period, but perhaps the average doctor does not feel justified in thinking of a vacation during these strenuous times and with such unsettled conditions. However, the busy doctor needs an occasional rest and change from the routine of regular work, and the short period of recreation in the mountains, at the sea shore, at nearby lakes, or even in a distant city where he will be free from the routine of his regular work, will prove of inestimable value to him in stimulating flagging energies, and physically and mentally equipping him for better work when he returns home.

THE members of conscription boards are not holding positions that are particularly coveted. In fact, a position on a conscription board is a very distasteful job, for no matter how conscientiously the service is rendered, a great deal of criticism and exceedingly bad feeling will be stirred up through the decisions made. To our notion, a great deal of embarrassment could be avoided if boards were required to serve in cities distant from the homes of the members. Such a plan would relieve the conscription boards in a very large measure of the embarrassment occasioned by passing judgment that is bound to make enemies among friends and business associates.

COMPULSORY antityphoid vaccination has solved the formerly serious question of typhoid fever in our army camps, and the record should have great weight with the laity in the general adoption of antityphoid vaccination. It is all well enough to talk about careful sanitation, but the fact remains that no one knows when he or she may run into a typhoid infection when the food and drink is not under the strictest control. Summer resorts and camps are a prolific source of dissemination of typhoid fever, and the vacation period will be less likely to end in disaster if preceded by antityphoid vaccination.

WE had hoped that politics would not influence appointments in the Medical Officers' Reserve Corps, or in fact in any way influence appointments in the Medical Department of the Army and Navy, but if all reports are true we are expecting too much. If ever there was a time when party politics should be forgotten it is during war times, when the country needs patriotism, loyalty and efficiency above everything else. It is no time to further the interests of favorites or to distribute rewards for political service, or in the hope of gaining political service.

THE New York City Board of Health, through one of the alert men connected with the office, detected a spurious neosalvarsan that was being sold in the city of New York. The fake remedy was found to be composed of salt and a little coloring matter, and, therefore, worthless. Specimens of this fake were exhibited at the annual meeting of the American Medical Association, and the packages exactly duplicated the original packages of the real neosalvarsan in every detail, not the slightest variance being detected. It is unfortunate that the display did not show some method by which fake neosalvarsan could be detected from the original.

THAT pellagra is on the decrease is shown by the drop in the death rate from pellagra in 1916 as shown in statistics brought out in the report of one of our insurance companies. Another feature that points to the decrease in the disease is the increased prosperity which has prevailed in the industrial and agricultural communities of the South during 1916. Negroes show a higher pellagra mortality than white persons, and the disease is much more frequent among females than among males. From the above report it is evident that this comparatively new scourge probably is under control, and the measures instituted by the United States Public Health Service to eradicate the disease are proving effective.

MEDICAL and surgical supplies are getting scarcer every day and harder to obtain. Most hospitals have been notified that they cannot be supplied with the usual amount of gauze, cotton and other dressings, even at the enormously advanced prices. Some drugs and chemicals have dropped in price, though for the most part there has been a sharp increase, and a few alkaloids are almost unobtainable. What the conditions will be six months from now it is difficult to foretell, though it is rather safe to count on conditions getting worse instead of better. At all events physicians and hospitals should economize in the use of drugs, chemicals and surgical dressings, for the Government will be served first, and it may be that when this is done there will be nothing left for anyone else.

As a means of preventing the interstate spread of diseases either by military forces or by the civilian population, the United States Public Health Service has arranged to vaccinate without cost any person who may apply at certain stations designated by the department. Vaccination will be given against any one or all of the following diseases: smallpox, typhoid fever, and paratyphoid fever. If desired a certificate of vaccination will be issued to the person vaccinated. Unfortunately Indiana has but one station, and that is located at Evansville, at the extreme southern part of the state. Application for vaccination should be made to the representative of the United States Public Health Service at that place.

If there ever was a time when partisan politics should be cast to the winds it is now when the country is at war, and yet we are witnessing the humiliating spectacle of having the nation and all that it stands for made a football to be kicked and tossed about by shallow brained

politicians who seemingly have no other object in view than advance for themselves or their friends. And the worst of it is, we are placed in the unfortunate position of not being able to change the order of things or punishing those responsible for the predicament we are in until irreparable damage has been done. Too little thought is given to the selection of our representatives at Washington, and in consequence, when a crisis like the present arises, we pay a heavy penalty for our carelessness.

IN his speech before six thousand doctors in the New York Hippodrome during the recent session of the American Medical Association, Colonel Roosevelt threw a bomb when he declared that every eligible doctor in the United States should be compelled to give his services to the country in the present war with Germany. He paid his respects to the "conscientious objector" who doesn't want to kill a foe, by saying that he would send such a man to the front without a gun, and perhaps after the conscientious objector gets there he will change his mind. There will be a few "conscientious objectors" in the medical profession, but if, as it is claimed, 50,000 doctors are needed to care for the men in our Army we believe that that number will be found willing to perform the work expected of them.

THE medical departments of the government are responsible for the examination of recruits, the hygiene of camps and for the care of the wounded. As yet the surgeons general have not been given full authority to go ahead with the work as it should be done, nor has ample means been forthcoming to meet this responsibility. However, the president as commander-in-chief, can give the surgeons general full authority, and Congress can give them the ample means, but up to the present time neither the president nor Congress has been able to give them a sufficient number of men from the medical profession, as it is a volunteer service. It is up to the medical profession of the country to furnish the men, and until there is a sufficient number of medical men, authority and means will not accomplish very much. Doctors must rally to their country's need! Now is the time for medical men to show their loyalty in the nation's crisis—your nation—your country! Will Indiana physicians face this responsibility? Will they hold back when their country needs them? Each doctor must answer this for himself.

UP to the time of going to press with this number of THE JOURNAL we have heard very little about the preparations being made for the annual session of the Association scheduled to be held in Evansville on Wednesday, Thursday and Friday, September 26, 27 and 28. However, we feel sure that the officers and committees are working zealously to complete a program that will be attractive, and we know that the local profession at Evansville is making all necessary arrangements for entertainment. The next, or September, number of THE JOURNAL will contain the official program for the session, with abstracts of all papers, and the announcements. As that number of THE JOURNAL is the only means by which the session is advertised, our readers are asked to look for it between the 15th and the 20th of the month. If any reader does not receive his copy by September 20 he is requested to write us promptly and a duplicate copy will be mailed at once.

THE *Jour. A. M. A.*, in its issue of July 14, in commenting on the voluminous literature on the food problem, commends as "specific, sane, and clearly understandable" the propaganda recently formulated by the Bureau of Home Economics of the New York Association for Improving the Condition of the Poor; and quotes from their leaflet—aimed to suggest such meals as will be best for growing children—the following:

To get the best results, spend money for food as follows:

1. Spend from one fourth to one third of your food money for bread, cereals, macaroni and rice.
2. Buy at least from a third to half a quart of milk a day for each member of the family.
3. Spend as much for vegetables and fruits together as you do for milk. If you use half a quart of milk for each member of the family, this may not always be possible, then spend as much for vegetables and fruit as a third of a quart of milk a day would amount to.
4. Spend not more for meat and eggs than for vegetables and fruits. Meat and eggs may be decreased with less harm than any of the other foods mentioned. The amount spent for meat may decrease as the amount spent for milk increases.

THE Physicians Casualty Association of America, with offices at Omaha, Nebraska, have adopted the following provision governing the question of "war hazard" as pertains to enlisted doctors holding membership in their association:

"Members joining the Medical Corps of the United States Army, Navy or Marines, shall for the period ending Sept. 10, 1918, receive the same benefits to which they would be entitled did they not join such

corps, when the accidents out of which claims for such benefits arise occur while such members are within the United States, and 20 per cent. of such benefits when such accidents occur while such members are on the Seas or on foreign soil; provided, no member in such Medical Corps shall be entitled during such period to the weekly benefits for total or partial disability, whether the accident out of which such total or partial disability arises occur while the member is in the United States or elsewhere."

It was also provided that the secretary be instructed to inform all the members concerning the adoption of such provision, and direct each member to forward his membership certificate to the office of the secretary for the purpose of having endorsed thereon the substance of such provision. As mentioned elsewhere, all enlisted men, and those contemplating enlistment, should give special attention to the matter of their insurance and find out just where they stand as regards their policies and the war clause.

SINCE our comment on the practice of some physicians to secure publicity and notoriety through newspaper accounts of medical and surgical cases with which they have been connected, we have been favored with numerous newspaper clippings from various towns and cities in Indiana showing the extent to which the practice flourishes. We are filing these newspaper clippings in THE JOURNAL'S scrap-book. Why do self-respecting doctors cheapen themselves by permitting and even soliciting newspaper exploitation of themselves? As we frequently have said, occasionally a doctor's name may appear in connection with a newspaper report of an operation or case of injury and such publicity be without the doctor's knowledge or consent, but when a doctor's name appears in newspaper accounts of medical and surgical cases with striking regularity it is a safe bet that the doctor so frequently mentioned is responsible for the publicity. And right here let us say that there are some doctors in Indiana who for years have had large practices, and yet extremely rarely or never have their names appeared in any newspaper in connection with medical or surgical cases. The reason is obvious.

CONSCRIPTION examinations are showing up the ability of the medical profession to detect diseased conditions or defects which are the basis of rejection for military service. However, it is a little amusing to learn that the coach for a football team, a perfect physical specimen of manhood, and desirous of serving his country, was rejected, and the board offered no rea-

son for the rejection, even when pressed for an explanation. Another applicant, with a chronic purulent otitis media, was informed that he lied when he said that he had impairment of hearing in one ear, and was promptly passed for service in the army. Still another young man, suffering from a marked valvular disease of the heart, was pronounced absolutely sound and fit for army service, and the further information was volunteered that the family physician did not know what he was talking about when he had told the young man that he had a leaky heart and should be careful of himself. Fortunately such inexcusable blunders, due to carelessness or ignorance — perhaps a combination of both — are relatively infrequent, as it also is fortunate that most, if not all, of the examinations by the conscription boards will be gone over a second time with a view to eliminating error. However, every doctor serving on the conscription board knows his limitations, and whenever he is not competent to pass on certain diseases or defects it is his duty to acknowledge his incompetency in that direction and adopt means of protecting himself as well as the government and the conscript. It will be a little embarrassing for some of the doctors to find that their ignorance has been exposed.

THROUGH newspaper clippings we learn that White County has been visited by four so-called "radium specialists" who claimed that they had \$3,500 worth of radium with which they were enabled to cure any disease, and they promptly proceeded to swindle people out of comparatively large sums of money. The evidence seems to show that one treatment was supposed to do the work, and an asthma sufferer paid \$100 for a "radium" treatment. A son of the asthma sufferer was given another treatment at the reduced price of \$32.50; and a neighbor woman was charged \$62.50 for a treatment that was supposed to remove "scum" from the eyes. After receiving these sums of money, the "radium specialists" disappeared, and of course have not been seen since. The interesting feature in connection with this report is that people can be induced to part with such comparatively large sums for single treatments at the hands of utter strangers. There are competent, well-trained, and reputable physicians in White County who can take care of any and all of the ills of the people of that county, and if they are not able to do so, would be quite honest in referring them to specialists in adjoining cities who could take care of them; and yet it is very probable that had one of these White County

physicians charged even \$5 or \$10 for a single radium treatment—a real and not a fake treatment at that—the patients who were so easily swindled by utter strangers would have held up their hands in holy horror and asserted that the honest, capable physicians of their community were trying to rob them. In passing, all we can say is, we are glad that they were swindled, and we are only sorry that the amount taken from them was not larger, for if they are such fools as to ignore the physicians of White County, whose ability, integrity, and record for fair dealing is established, they deserve all that they got.

A CERTAIN amount of criticism and complaint is bound to occur in connection with appointments to any positions of honor and trust, but it would seem that there is some reason for complaint that many army appointments are not founded on a desire to secure efficiency or to exhibit a spirit of fairness. When incompetent and untrained men are made captains or majors, and boosted over the heads of more deserving men, there certainly is room for the suspicion that politics or undue favoritism is responsible.

Even in the medical department, where efficiency is supposed to be considered and exacted with more regularity, it has been noted that some choice appointments have gone to doctors who by education, experience and training are far less fitted for the position than some other men who have been obliged to be content with positions of much less importance. No doubt some of these errors will be corrected later on, though it is quite certain that friction is bound to occur when men of recognized ability are obliged to submit to the orders and recommendations of inferiors. A great corporation aiming at the greatest success selects its men wholly from the standpoint of efficiency, but the national, state and municipal governments, controlled as they are by politics, oftentimes make efficiency a secondary consideration.

There is no way by which this condition can be changed without altering the much-prized rules of democracy. But with all its faults, and they are many, our form of government, hampered as it is by the work of the political spoilsman, is superior to any of the other forms of government where the people have less voice in controlling their own destinies. In consequence, we should be happy in the knowledge that the bestowal of honors on incompetents or on those not entitled to the same might be infinitely worse under almost any other political system.

THE prohibitionists have a hard nut to crack when they are confronted with the possibility of seeing the sale of patent medicines very greatly increased when national prohibition is secured, and with no corresponding decrease in the ill effects of alcoholism, which can be just as pronounced through the consumption of patent medicine as it is through the products of the brewery or distillery. The patent medicine interests are quite satisfied to have national prohibition as long as it has nothing to do with the sale of patent medicines. In fact, it is supposed that the patent medicine interests are greatly in favor of prohibition, for it means an increase in the sale of patent medicines. However, if the prohibitionists are sincere in their efforts they will have to frame a bill that not only cuts out alcoholic beverages, but all alcoholic patent medicines as well, and there will come the rub, for the patent and proprietary medicine concerns represent a total capitalization of nearly \$72,000,000, and those interests are not going to give up without a struggle. Now the question arises as to whether the prohibitionists are going to fight the liquor proposition on its merits or not. Incidentally, the Hon. Jacob E. Meeker, not a prohibitionist, a member of the House of Representatives and hailing from St. Louis, gives the prohibitionists something to think of when he, in a speech delivered before the national House of Representatives, voiced the following sentiments which we reproduce from the *Jour. A. M. A.*:

"You would no more permit a brewer to send a circular into your home advising you to use a bottle of beer a day and give another bottle to your baby than you would let him send poison. But you will put one of these bottles up on the shelf with full instructions as to how much to give the baby, how much an adult is to take, and if mother is not watching you can get a good jag on before she can get you. In the name of reform, in the name of common sense, in the name of common decency, I say to the men of this house this afternoon, if you let your prohibition amendment go on with the federal exemption to 'patent medicines,' you have made a free gift to all men who shall go into the conversion of alcohol into 'medicine' instead of beer, wine and whisky, and they escape without tax. . . . The thing that shocks me is that men will not see that when they exempt these 'medicine' men from taxation they permit them in the name of 'medicine' to put that amount of alcohol into what they sell which, if put into any other drink, would drive the producer out of the country under the whip of public scorn. You would buy that by the bottle to put into your home, and you would say to yourselves, we are fighting the 'demon rum.' Listen: If the principle of prohibition is right, we should enact it into law, and we should enforce that law if it takes a standing army to do it. If the principle of prohibition is wrong, we should oppose it on the ground of principle and not as a matter of dollars and cents, not as a matter of saving any man's commodity."

DEATHS

CHARLES YOKE, M.D., Bridgeport, died July 20, of pneumonia. Aged 60 years.

VIRGINIA MURPHY, widow of the late Dr. A. J. Murphy of Jeffersonville, died July 20, aged 80 years.

MICHAEL A. YOUNG, M.D., Indianapolis, was killed instantly by an interurban car on July 10. Aged 59 years.

S. R. ROBERTS, M.D., formerly practicing physician of Oxford, died July 14 at the home of his son in West Lafayette, aged 83 years.

L. V. CONWELL, M.D., Van Buren, died July 8 at the Marion Hospital following an operation for rupture. He was 63 years of age.

LYCURGUS S. NULL, M.D., New Haven, died July 8, aged 79 years. He was an ex-state senator and representative from Allen County.

GEORGE EDWARD WALTON, M.D., for many years president of the Medical School of Cincinnati, died June 28 at the home of his son, Frank Walton, near Farmersburg, aged 77 years.

ISAAC L. NEELY, M.D. of Corydon died June 24, aged 61 years. He graduated from the Kentucky School of Medicine in 1882, and has practiced continuously in Corydon since that time.

JAMES P. McMILLAN, M.D., aged 74 years, died July 5 at his home in Medora. He was a veteran of the civil war; graduated from the Miami Medical College, Cincinnati, in 1869, and located at once at Medora where he has continued to practice.

ROBERT S. MCCRAY, M.D., aged 59 years, died July 7 at home in Morristown. Graduated from the Indiana Medical College in 1884; practiced two years at Kennard, and removed to Morristown in 1886 where he continued to practice until his last illness.

JAMES W. THOMAS, M.D., died July 2 at his home in Owensville, following an illness of two years, aged 56 years. Dr. Thomas was born at Owensville in 1861, graduated in medicine in Kentucky in 1894, and had practiced in Evansville and Chicago prior to locating in Owensville. He was a member of the Gibson County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. D. A. PETTIGREW, formerly of Winamac, has removed to Logansport for the practice of medicine.

DR. G. W. H. KEMPER, of Muncie, is attending the National Encampment of the G. A. R. at Boston.

DR. G. H. WILSON, formerly of St. Louis, has located at Bicknell for the practice of medicine and surgery.

DR. WILLIAM ALLEN PUSEY was elected president of the Chicago Medical Society at its annual meeting.

THE Supreme Court of Illinois, at the June term, declared the optometry acts of Illinois unconstitutional.

DR. J. M. MORRIS of Fulton, with his son and family of Fort Wayne, were injured in an automobile accident on July 3.

DR. W. H. HARRISON of Kokomo is making a splendid recovery from an operation for appendicitis performed early in July.

DR. J. W. PARRISH of Shelbyville received slight injury recently when the machine he was driving ran into a ditch and was badly damaged.

THE Home Hospital and the St. Elizabeth Hospital, Lafayette, are recipients of gifts of \$5,000 each by the will of the late Fred S. Chase.

AN epidemic of smallpox is reported at the State Soldiers' Home at Lafayette, the entire number of members of the Home having been exposed.

DR. JOSEPH RILUS EASTMAN, of Indianapolis, has been appointed by Newton D. Baker, secretary of war, to the general medical board of the war department.

DR. ERSKIN SUMMERS, recently graduated from the Indiana University School of Medicine, has opened an office for the practice of medicine at Craigville.

DRS. A. C. HOLLY and J. W. RHODE of Attica left July 12 for an automobile and camping trip through Michigan. They spent a month's vacation in fishing and hunting.

Dr. and Mrs. L. A. WILSON and son Robert of Michigan City spent part of July in Huntington, W. Va., Washington, D. C., New York City, Buffalo and Boston, Mass.

Dr. HENRY REEDER of Jeffersonville was married recently to Miss Mary A. King of New Albany. They will reside in Louisville where Dr. Reeder expects to open offices.

Dr. E. J. DuBois, city bacteriologist, Indianapolis, has been granted an indefinite leave of absence to cover his term of service as camp bacteriologist at Fort Benjamin Harrison.

Dr. A. W. BRAYTON of Indianapolis was the guest of the Johnson County Medical Society at their annual meeting held at Franklin July 11, and delivered an address before the society.

THE members of the Henry County Medical Society, with their families, enjoyed a picnic at Shively's Park, Newcastle, July 10. Dr. Frank Cregor of Indianapolis delivered the address.

Dr. J. E. FATTIC of Anderson is organizing an ambulance unit in that city. There is a lack of available nurses for the unit, and a request for volunteers has been sent out by Dr. Fattic.

Dr. CHARLES J. ROTHSCHILD of Fort Wayne announces the removal of his offices to Suite 338-343, Utility Building, East Wayne Street, and will give special attention to obstetrics and obstetrical surgery.

THE Rose City (Newcastle) Medical Society entertained the Henry County Medical Society at a banquet and theater party recently, two reels depicting surgical operations being included in the entertainment.

Dr. D. C. PETERS, formerly of Greentown, and Dr. B. J. Peters of Kokomo, have formed a partnership for the practice of medicine at Kokomo. Their offices are located in Rooms 201-202 College Building.

Dr. BROWN S. McCLINTIC of Peru returned recently from Red Cross service at the battle front in Europe, has enlisted in the United States Army Medical Service and reported at Washington, D. C., for duty.

THE members of the Jay County Medical Society and their families enjoyed a banquet and program at the Pennville Hotel, Pennville, on July 6. Dr. M. T. Jay of Portland acted as toastmaster, and responses were given by Drs. Caylor, Mix, Mason and Moore, and the Rev. Hogan.

THE Summer Mission for Sick Children at Fairview Settlement, Indianapolis, was opened to patients on July 2. Dr. Eugene B. Mumford has been appointed director and Dr. Homer W. Cox, physician in charge.

Dr. WILLIAM J. BUTLER of Chicago was the guest of honor of the White County Medical Society early in July. Dr. Butler conducted a clinic in the afternoon and addressed the physicians at a banquet in the evening.

THE Dearborn-Ohio Medical Association was addressed by Dr. J. A. MacDonald of Indianapolis at a recent meeting. The association at this meeting passed, unanimously, a resolution favoring war time prohibition.

THE Pulaski County Medical Society held their annual picnic at Bass Lake on July 3. Dr. Brown McClintic of Peru, recently returned from Red Cross service in Russia, delivered an address on his experiences at the battle front.

THE new Jay County Hospital, Portland, was opened to the public on July 18, and on that day approximately 2,000 visitors called at the hospital. It is one of the most complete, convenient and modern hospitals for its size in this part of the state.

Dr. W. A. GEKLER, formerly superintendent of the Indiana State Tuberculosis Hospital, Rockville, and lately medical superintendent of the Municipal Tuberculosis Sanitarium, Chicago, has located at 128 South Sixth Street, Terre Haute, and will limit his practice to internal medicine and diagnosis.

NINETY-TWO captains and lieutenants of the United States Medical Reserve Corps, who have been in training at Fort Benjamin Harrison, and whose homes are in the state of Pennsylvania, on July 14 were assigned to national guard camps in Pennsylvania and left immediately for their various appointments.

THE first mobile hospital unit to be offered by the women of the United States to the government will be that of the New York Infirmary for Women and Children, backed by the National American Woman Suffrage Association. The unit will have a force composed entirely of women, probably numbering eighty.

BROOKS HUGHES WELLS, M.D., New York, emeritus professor of gynecology at the Polyclinic Hospital, vice-president of the American Gynecological Society, and an editor of the *American Journal of Obstetrics and Diseases of Women and Children*, died July 6, the result of injuries received in collision with an automobile.

THE Washington State Medical Association met in annual session at Spokane, June 20-22, the following officers being elected for the ensuing year: president, C. Stuart Wilson, Tacoma; vice-presidents, W. D. Read, Tacoma, and R. T. Congdon, Wenatchee; assistant secretary-treasurer, J. H. O'Shea, Spokane. Tacoma was selected as the place of meeting for 1918.

A BILL has been introduced by Representative Osborn, and referred to the committee on military affairs, providing that medical and pre-medical students in attendance at national reserve officers' training camps shall be placed in medical schools to complete their medical studies, and thereafter serve in the rank for which they shall have qualified.

THE physicians of Portland entertained a number of visiting physicians at a banquet in the dining room of the new Jay County Hospital at Portland, and had for their honor guest Dr. Charles P. Emerson of Indianapolis. Following the banquet, Dr. Emerson addressed a mass meeting at the Church of Christ, on the subject "The Modern Hospital and Its Relation to the Community."

THE Educational Section of the State Council of Defense is sending out appeals to college and university men and women to fill lecture engagements to assist in the molding of public opinion upon the issues and the problems of the war, such engagements to be made through the Speakers' Bureau of the Educational Section of the State Council of Defense, State House, Indianapolis.

DR. BYRON J. PETERS, of Kokomo, who graduated from the Indiana University School of Medicine in June, 1916, and has since served a year in the Methodist Hospital at Indianapolis as intern, has received his commission as first lieutenant in the Medical Reserve Corps of the United States army, and expects orders to report for duty at any time. Dr. Peters was married June 20, 1917, to Miss Mary Baker of Bloomington.

THE former home of the College of Physicians and Surgeons, New York City, is being transformed, along European and Canadian lines, into a training school ready to receive disabled soldiers and sailors and teach them trades which will make them selfsupporting. The school has been organized under the war council of the American Red Cross, and has been endowed by an initial donation of \$50,000, and the use of the building by Mr. Jeremiah Milbank. It is under the temporary direction of Mr. Edward T. Devine, head of the New York School of Philanthropy.

MEMBERS of the Wells County Medical Society were hosts to the Adams County Medical Society at a goodfellowship banquet on July 17. Dr. S. A. Shoemaker of Bluffton presided as toastmaster, and Drs. J. M. Miller, Decatur; C. L. Blue, Tocsin; E. W. Dyar, Ossian; S. D. Beavers, Decatur; H. B. Shoup, Zanesville, and S. P. Huffman, Decatur, responded to toasts.

DR. H. S. HATCH has been elected superintendent of the Sunnyside Sanatorium, established by Marion County for the care of tuberculous patients, just outside of Indianapolis. Dr. Hatch is a graduate of the University of Vermont, and comes to Indianapolis from Michigan where he has been employed as tuberculosis expert by the Michigan State Board of Health. The new sanatorium will be opened about September 1.

INDIANA physicians desiring information concerning appointment in the Medical Officers' Reserve Corps should make application to The Surgeon, Fort Benjamin Harrison, or Major George M. Wells, Retired, M. C., 622 Hume-Mansur Building, Indianapolis. Upon request to the above mentioned parties, application blanks will be sent. These blanks must be carefully filled out and sworn to before a notary public; they must be accompanied by a county clerk's certificate certifying that the applicant is a licensed practitioner; two letters from citizens testifying to the character of the applicant must accompany the application. After the application is accepted, the physician must pass a physical and medical examination before being granted a commission.

THE following students received their M.D. degree from the Indiana University School of Medicine in June:

J. A. M. Aspy, Hope; H. C. Brauchla, Warren; G. M. Cook, Indianapolis; C. C. Craig, International Falls, Minn.; H. L. Foreman, Huntington; J. R. Frank, Mauckport; C. N. Frazier, Bluffton; W. W. Gibbs, Mobile, Ala.; J. L. Glendenning, Indianapolis; L. L. Harding, Kirkland; A. D. Huffman, Beech Grove; V. D. Keiser, Indianapolis; K. M. Koons, Mulberry; F. A. Lampman, Howe; J. S. Leffel, Twelve Mile; L. R. Lingeman, Brownsburg; P. V. Lynch, Evansville; M. L. Marquette, Brooklyn; E. H. Mitchell, Indianapolis; D. H. Murray, Bloomington; E. G. Nelson, Laporte; W. A. Ohmart, North Manchester; Lyman Overshiner, Summitville; M. T. Patton, Veedersburg; F. B. Roberts, Evansville; R. L. Smith, Brooklyn; Troy Smith, Terre Haute; R. A. Solomon, Indianapolis; L. E. Somers, Bluffton; H. S. Sumerlin, Indianapolis; J. O. Thayer, Arcadia; A. G. Thomas, Corydon; H. A. Walker, Indianapolis; Otis Wildman, Butlerville; H. R. Willan, Trafalgar; G. H. Wisener, Farmersburg.

Doctor of Medicine Cum Laude: Roball H. Bandelier, Indianapolis; S. R. Edwards, Indianapolis; G. B. Kent, Mulberry; E. N. Kime, Indianapolis.

THE second examination of the National Board of Medical Examiners was held in Washington, D. C., June 13 to 21. Of the twenty-four qualified candidates, twelve appeared for examination, the others having been ordered into active duty between the time of their application and the date of the examination. Of the twelve who took the examination, nine passed. The regular Corps of the Army and Navy may be entered by successful candidates, without further professional examination, providing they meet the adaptability and physical requirements. The next examination will be held in Chicago, October 10 to 18, and another examination will be held in New York City in the early part of December.

A MEDICAL ADVISORY COMMITTEE for the war council of the American Red Cross has been appointed to provide expert advice in questions of sanitation and public health arising out of war conditions. The committee is as follows: Dr. Simon Flexner, director of the Rockefeller Institute, chairman; Dr. John W. Kerr, assistant surgeon-general U. S. Public Health Service; Dr. Herman M. Biggs, director of the New York State Department of Health; Dr. William H. Welch, dean of the school of hygiene, Johns Hopkins University; Dr. Frank Billings, professor of medicine, University of Chicago; Dr. M. J. Rosenau, professor of preventive medicine, Harvard University; Mr. Wickliffe Rose, director of the International Health Board; Dr. Victor C. Vaughan, professor of hygiene, University of Michigan; Dr. Charles V. Chapin, department of health, Providence, R. I.; Dr. Richard P. Strong, professor of tropical medicine, Harvard University; Dr. Richard M. Pearce, professor of research medicine, University of Pennsylvania. Ex officio members are Col. Jefferson R. Kean, director-general, department of military relief, and Dr. T. W. Richards, assistant director-general.

THE Bureau of the Census is planning to prepare and publish a monograph on the Mortality from Tuberculosis covering the calendar year, 1918. They are seeking to obtain the cooperation of all physicians to the extent of carefully recording or supervising the statements of occupations upon the death certificates during that year. A circular letter has been sent to all the physicians in the United States, from which we quote the following:

"More accurate and definite statements of the occupations of decedents should be written

upon death certificates. Until this is done mortality statistics by occupation will continue to be unsatisfactory.

The Bureau of the Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

"As a physician you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of occupation.

"Will you not therefore take pains to see that the occupation items upon each one of your death certificates are properly supplied?"

FROM July 1 to August 1 the following Indiana physicians have been ordered to report for service and training as follows:

To Fort Benjamin Harrison: Lieuts. Lee F. Hunt, Anderson; O. B. Norman, Bedford; Forrest L. Reese, Bicknell; C. F. Bayer, Indianapolis; J. H. Willis, Evansville; O. A. Newhouse, Montezuma; C. K. Jones, Indianapolis; Frank A. King, Garrett; U. G. Goodwin, Monticello.

To Army Medical School, Washington, D. C., for instruction: Lieuts. Chester A. Stayton, A. J. Ullrich, Indianapolis; and Brown S. McClintic, Peru.

To examine National Guard and then to Fort Benjamin Harrison for instruction: Lieuts. H. W. Gante, Anderson; C. W. Ashley, Bicknell; C. C. Crampton, Delphi; J. R. Dillinger, French Lick; D. R. Benninghoff, E. N. Mendenhall, Fort Wayne; C. C. Bassett, Goodland; F. L. Hosman, C. H. Mayfield, Indianapolis; C. E. Barcus, Logansport; H. P. Butts, Pierceville; D. E. Reed, Russellville; E. E. Leeson, Sharpsville; A. E. Mozingo, Tipton.

To Chicago: Lieut. F. M. Whisler, Wabash.

To Rockefeller Institute for Medical Research, N. Y., for instruction in laboratory work: Lieut. U. G. Goodwin, Monticello.

To Allentown, Pa.: Lieuts. L. A. Elliott, Elkhart; F. A. Brayton, K. L. Craft, H. A. Shimp, W. M. Stout, Indianapolis; E. M. Shores, North Terre Haute; J. G. Kidd, Roann; C. R. Hoy, Syracuse.

To Cornell Medical College, New York, for instruction in military roentgenology: Capt. James W. Squire, Fort Wayne.

Honorably discharged: Capt. William F. Clevenger, Indianapolis.

CORRESPONDENCE

JUST A KICK

EVANSVILLE, August 1, 1917.

Editor THE JOURNAL:

I do not believe I ever had the opportunity of seeing the old adage, "The cow gives lots of milk, but she always kicks it over," so aptly exemplified as appears in THE JOURNAL of July, 1917, in the article of Dr. George F. Beasley on "The Evolution of a Splint for the Femur." On page 278, in speaking of an anesthetist, he says that his first choice (perhaps for manners' sake) is a physician, though he intimates that an intelligent layman, under guidance, may give the anesthetic satisfactorily. And, referring to a layman as an anesthetist, he says, "Taking them as they run, I do not know but that they are about as good, if not better, than the average physician you pick up."

To judge from Dr. Beasley's estimate, the physician below the average certainly would be a very unskilful person, and even the average physician does not amount to much. I presume that the doctors in Dr. Beasley's audience were above the average in intelligence, or at least thought they were, and the episode indicates that modesty was crucified and conceit rode on billows of overweening self-esteem. Dr. Beasley must feel that he belongs to a mighty "bum" profession when the average is hardly equal to the laity, and even most any fellows who happen to stand around. What ordinary mortals must start out in the medical profession! Criticism of the faults of the medical profession oftentimes is justified, but Dr. Beasley's comments are not in keeping with the facts, and should be challenged.

D. S. GOBLE.

JUKES PERPETUATED

MICHIGAN CITY, IND., July 26, 1917.

Editor The Journal: I am enclosing the report of a case which I think shows the difficulties experienced by many physicians and the incongruities under which the medical profession has to work.

Jukes, 29 years of age, married, electrician (?). Maternal grandmother lived to an advanced age but had always suffered with intense migraine. Mother suffers with migraine; has huge goiter with exophthalmic symptoms. Sister has immense goiter with progressive paralysis and uses a wheeling chair. Father was a railroader and was killed in a railroad accident

at 30 years of age, when Jukes was 7 years of age, since which time he has been assisting in earning a livelihood for the grandmother, sister and the mother, who married later, bearing several children who were more or less neurotic.

Having become enamored with a school girl, Jukes stopped school before completing the grammar grades, since which time he has been variously employed as messenger boy, delivery boy, clerk, carpet section manager, etc., until he was advanced to the position of electrician, all promotions being accompanied with increased pay.

When a child, Jukes was the victim of choking attacks which were relieved by loosening the collar; outside of this measure no other therapeutics was regarded as necessary (*petit mal*?). Has always been considered "a very nervous person" by his employers and his mother-in-law, who opposed his marriage on this account, and in which belief she has persevered to the extent that she will not allow herself to speak to him for violating her wish in the matter, although Jukes is the parent of a very attractive child and about to become the father of another. In July, 1915, while riding a bicycle, the subject met with a slight accident, landing on his forehead; being in no way incapacitated, he proceeded on his way (*petit mal*?).

Jukes stoutly maintains that his first convulsion occurred in May, 1916, when he was about to play a violin selection at a church festival, which was very much disorganized by this first epileptic seizure; his wife promptly loosened his collar and was in no way alarmed by the so-called first attack. Convulsions have been as many as four a day, of the grand mal type, which are preceded by an aura in the form of difficulty in assembling his thoughts, and as infrequently as one in three weeks. There is a loss of weight and strength with gradual mental impairment, with an increasing aptitude for applying for maintenance for himself and family from the charity organization and township trustee, to say nothing of the trouble and expense he has been to various physicians who have rendered all kinds of service gratis, with the understanding that his pregnant wife would also be attended in a near confinement.

As there was a difference of opinion among some of the local physicians as to whether the epilepsy was of the traumatic or neurotic type, it was made possible for him to go to a Chicago specialist, who did not detain him long, but sent him home. Jukes determined to go to the State Epileptic Hospital for a safe

occupation, medical and custodial care, although he had previously enlisted the sympathy of some one to make the initial payment on a carpet loom for which the charity organization was to stand sponsor, with the understanding from Jukes that he was to make weekly payments, none of which have been met. It might be said here, that there is very little if any cooperation between these so-called charity societies which have charge of funds donated by kind but ignorant philanthropists, nor is there any inquiry on the part of the county trustee as to the deserved merits of the case, although he is the bursar for the county taxpayer's beneficence; it seems that there ought to be some concurrent effort on the part of these so-called philanthropic bodies, the doctor and the lawyer, to conserve and protect the charitably inclined against fraud, otherwise the supposed philanthropy becomes a misanthropy to society at large and there is no permanent assistance rendered to the indigent.

In this case, Jukes had decided to go to the hospital for epileptics, the papers had been filed, and a permit issued for Juke's transfer to the hospital, but as the order had arrived just two days later than he had anticipated, he again decided to move into a house where he placed his family and a water power washing machine; the landlady was ignorant of his arrival and deposition, but this was a detail to Jukes as was the payment of the rent. When the state officer came and notified him of his acceptance to the hospital, Jukes was of the opinion that he was in a flourishing business, supporting his wife and child, and that the idea of his desire for institutional care was an intrigue. Thereupon, actuated by this characteristic epileptic conjecture, he secured money with which he procured a lawyer, who appeared before the circuit judge who had obtained the permit for admission to the hospital. Without consulting the physicians to whom Jukes had appealed and without any inquiry as to how he had sustained himself and family, the judge promptly released Jukes from the state's custody on the grounds that "he had changed his mind."

QUESTIONS

Have medical findings ceased to be facts even in the circuit court when there is an attorney with a fee to collect?

Has the state no responsibility to the taxpayer in reducing the high cost of upkeep of prolific, indigent epileptics who should at least be sterilized if left at large, in order to inhibit a predestined offspring?

Should not the county treasurer be reimbursed to the amount of commitment costs

when the patient or family has a "change of mind"?

Should not the commitment papers for an epileptic bear the signature of the nearest, most responsible relative, as an evidence of consent for institutional care? (The signatures and affidavits of relatives are prohibited on Indiana epileptic commitment papers.)

Should not patients suffering with some mental or nervous disease be handled with the same amount of consideration as a patient needing surgical attention or one needing medical treatment? It does seem that the sheriff, police and jails are not the proper avenues for the scientific management for those who are so unfortunate as the mentally afflicted.

ROSE ALEXANDER BOWERS.

SOCIETY PROCEEDINGS

MUNCIE ACADEMY OF MEDICINE

Meeting of June 29, 1917

In the absence of the president, Dr. U. G. Poland, the Muncie Academy of Medicine was called to order by past president Dr. O. E. Spurgeon.

Dr. C. M. Mix presented a case, with two skiagrams, showing a rarefying osteitis in the distal phalanges of each finger on both hands, in a middle aged male. Wassermann negative. Two diagnoses were made.

A most excellent paper on "Nausea and Vomiting" was read by Dr. H. D. Fair. Abstract.

A comprehensive study of one embraces the other. Clinically they are much the same. The vomiting center is in the medulla oblongata. The act may be incited by irritation of the centripetal nerves of the palate, tongue, pharynx or stomach; reflexly by irritation of the uterus, intestines or other organs; by offensive sights, smells or taste, or by direct stimulation of the vomiting center as by the injection of apomorphine.

The vigor and manner in which the stomach empties itself varies. The painless, projectile emesis characteristic of cerebral disturbance, and the painful, exhausting retching variety associated with gastric disturbance. The phenomenon ranges from a brief impulse lasting a few seconds, to a prolonged series of paroxysms ending in exhaustion or death.

Vomiting occurring in the initial stage of various fevers is probably due to the direct action of toxins on the blood. Reflex v. is more common than that due to direct cause. Personal idiosyncrasy and training are important factors. A careful history is essential when making a diagnosis for there may be such a thing as idiopathic vomiting. My most common experience has been with the vomiting of pregnancy. The greatest number will be benefited by popcorn. When the cause is toxemia the patient should change her habits; if condition is due to abnormality of uterus or cervix, of course this should be corrected. Nausea and vomiting following anesthesia can be prevented. When I have a patient under my care I allow her a glass of water just before going into the operating room. I use essence of orange on my mask

till the patient's air passages are permeated with its vapor before starting ether. Soon as she regains consciousness I allow her to drink all the water wanted. If the first glassful comes up well and good, it washes out the stomach. If it stays down it allays thirst and affords the patient a sense of comfort that is greatly appreciated. Nausea and vomiting due to anesthesia must be carefully differentiated from that due to some post-operative cause.

One troublesome type of nausea and vomiting is that associated with what the laity call their "bilious attacks." Patients should be deprived of all food except buttermilk in small quantities. If the patient needs fluids, enemas or intramammary injections of salt solution may be necessary. An empty gastrointestinal tract is essential to prompt recovery. I believe the treatment of nausea and vomiting should be prophylactic for both can in most instances be prevented; this is particularly true in cholera morbus, strangulated hernia, "bilious attacks," migraine, "summer complaints" of children, anemia, *mal de mar*, etc.

Hypodermic injection of one thing or another are often used to relieve nausea and vomiting, as is also the application of heat, cold, blisters, etc., to parts of patient's body, but we have no assurance that either will be of the least use.

To cure persistent vomiting we must search for and remove the cause. In all cases except a pure neurosis, malignancy or irreparable organic changes there is hope for a happy ending of the trouble. Even in the neurotic type suggestive therapeutics has given excellent results.

The paper was well discussed.

Adjourned. W. C. STEPHENS, Secretary, pro tem.

DELAWARE-BLACKFORD

Minutes of July 6, 1917

Regular meeting of Delaware-Blackford Medical Society was held in Muncie Y. M. C. A. building, Friday evening, July 6th, with past president C. A. Ball, presiding.

The application of John H. McMorries for membership was submitted by the Board of Censors and Dr. McMorris was voted into the society.

The address for the evening was made by C. E. Sellers who read a most excellent paper on "Infections of the Urinary Tract in Infants and Children, Due to *B. Coli Com.*," and exhibited charts showing the immediate response to the prescribed treatment. Dr. Sellers said in part: We formerly believed that pyelitis in young children was rare; probably because we did not take the trouble to make a thorough investigation. The urine was neglected and the symptoms credited to something else. As a response to over 600 communications I found only eight general practitioners who recognized the *Coli B.* as a factor in this class of infections. The older textbooks and medical publications are strangely silent on this subject, yet we now know the *Coli B.* is responsible for a large number of infections in the urinary tract of young children, particularly so in girl babies, probably in 80 per cent. Of these 50 per cent. will exhibit ammoniacal urine which is a precursor and ally to the infection. Pure cultures of *Coli B.* can be grown from smears taken from the vagina or urethra of 16 per cent. of apparently healthy female infants.

Crabtree found *Coli B.* in the blood of seven out of nine cases of pyelocystitis. Faulty metabolism and inefficient nutrition favor infection which may be

conveyed by channels other than the urinary tract, either ascending or descending, for infection has been found in babies three days old. In all systemic infections the kidneys excrete the predominating organism infesting the body. I believe that children with *Coli B.* infection suffer from a low grade acidosis over a long period of time. I further believe that 90 per cent. of pyelitis occurring during pregnancy owes its origin to infection of early childhood, which may have been latent for years. A group of *B.* unable to make its presence felt in an individual of robust health may produce serious pathology in either a child or adult who may, on account of various causes, be below par physically. The microscope will reveal this condition frequently in young males, and its use should never be omitted when attempting the diagnosis of any condition that leads one to suspect an infection.

An essential point in the treatment is to render the urine alkaline and to keep it so. As an antiseptic urotropin does not meet the requirements. The only remedy that has proved dependable in my cases is guaiacol, and I administer it in doses ranging from one to five drops.

The diagnosis is not difficult. In addition to the urinary findings we have a remitting temperature, frequently chills, and sometimes convulsions.

The paper was discussed by C. A. Ball, O. E. Spurgeon, W. W. Wadsworth and others.

Adjourned.

H. D. FAIR, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

HAY-FEVER POLLENIN SPRING-MULFORD.—A liquid obtained by extracting the protein of the pollen of rye, timothy, orchard grass, sweet vernal grass, and red top grass and standardizing the solution to a definite protein content. This pollen extract is said to be useful for the prevention and treatment of spring "hay-fever." It is supplied in a four syringe package containing increasing doses of pollen protein and in a one syringe package containing the maximum dose. The H. K. Mulford Co., Philadelphia.

HAY-FEVER POLLENIN FALL-MULFORD.—A liquid obtained by extracting the protein of the pollen of ragweed, golden rod and maize and standardizing the extract to a definite protein content. This pollen extract is said to be of value in the prevention and treatment of fall "hay-fever." It is supplied in four syringe packages containing increasing doses of pollen protein and in a one syringe package containing the maximum dose. The H. K. Mulford Co., Philadelphia.

BORCHERDT'S MALT OLIVE.—A liquid stated to be composed of olive oil 20 per cent., glycerin 10 per cent. and Borchardt's malt extract 70 per cent. The Borchardt Malt Extract Co., Chicago.

CITRESIA.—Magnesium acid citrate, the hydrated acid magnesium salt of citric acid. A colorless salt, very soluble in water and having a pleasant acid taste. It may be administered in place of solution of magnesium citrate by dissolving 25 gm. in 25 c.c. syrup of citric acid and 125 c.c. water. Horace North, New York.

Pituitary Liquid

$\frac{1}{2}$ cc ampoules 1 cc ampoules

The ideal preparation of the kind.

Entirely free from preservatives and objectionable chemicals.

Standardized by the Roth method.

For obstetrical cases, $\frac{1}{2}$ cc ampoules.

For surgical work, 1 cc ampoules.

Corpus Luteum

Guaranteed from true substance. Powder, 2 and 5 grain capsules* and 2 grain tablets.

Literature to physicians on request.

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CHICAGO

1667



Parathyroids—
Powder and Tablets, 1-20 grain.
Red Bone Marrow—
(Medullary Glyceride) Hema-
togenetic, Histogenetic.
Kephalin—
10-gramme packages.
Elixir of Enzymes—
Digestant and palatable vehicle.
Pineal Substance—
Powder and Tablets, 1-20 grain.
Pituitary, Anterior—
Powder and Tablets, 2 grain.
Pituitary, Posterior—
Powder and Tablets, 1-10 grain.

PASTEUR ANTIRABIC PREVENTIVE TREATMENT (Harris Modification).—An antirabic vaccine prepared from brains and spinal cords of rabbits, dead of fixed virus rabies infection, and standardized by the method of Harris. One dose is given for a period of fourteen days. Each dose is sent out separately. Eli Lilly & Co., Indianapolis, Ind. (*Jour. A. M. A.*, July 7, 1917, p. 39).

ACETYSALICYLIC ACID, M. C. W.—A brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. Mallinckrodt Chemical Works, St. Louis (*Jour. A. M. A.*, July 21, 1917, p. 199).

PROPAGANDA FOR REFORM

CREOSOTE-DELSON AND CREOFOS.—Creosote-Delson is said to be "beechwood creosote from which the irritating and caustic properties are removed by fractional distillation." It is marketed chiefly as Creofos. Creofos is said to be Creosote-Delson in an emulsion containing hypophosphites. The Council on Pharmacy and Chemistry declared Creosote-Delson inadmissible to New and Nonofficial Remedies because its identity and its difference from, and asserted superiority over the official creosote had not been established. It declared Creofos ineligible because its composition had not been satisfactorily declared, because the therapeutic claims were grossly exaggerated, because the name was nondescriptive of the composition and because the inclusion of hypophosphites was irrational (*Jour. A. M. A.*, July 7, 1917, p. 58).

SOME MISBRANDED NOSTRUMS.—The following "patent" medicines have been found misbranded under the federal Food and Drugs Act, chiefly because the

George S. Johnston Company

Wholesale Opticians

Optical equipment of every de-
scription—Prescription grinders
—Trial cases—Artificial eyes.

5 South Wabash Ave., Chicago, Ill.
223 Capitol Blvd., Nashville, Tenn.

therapeutic claims made for them were misleading and false: Quaker Herb Extract, a water-alcohol extract of an emodin-bearing drug.—Payne's New Discovery, a water-alcohol solution containing small amounts of baking soda, licorice and extractive matter from a laxative plant drug.—Payne's Quick Relief, chiefly turpentine with cayenne pepper, resin, camphor and chloroform.—Quaker Oil of Balm, containing turpentine, cayenne pepper, chloroform, etc.—Cooper's New Discovery, a nostrum of the alcohol tonic type, containing 20 per cent. alcohol, some emodin, aloes and a small quantity of oil of sassafras, together with reducing sugars.—Cooper's Quick Relief, a liniment consisting of cayenne pepper in alcohol (31 per cent.) flavored with oil of sassafras.—Wilson's Preparation, a powder containing largely starch, acacia and sugar with potassium acetate, calcium hypophosphite and quinin (*Jour. A. M. A.*, July 7, 1917, p. 58-59).

VENARSEN.—William A. Wilson, Kansas City, Mo., writes that he has advised the Intravenous Products Company that after using a great quantity of Venarsen, he can see no more effect on the cases treated than if so much water had been administered, and that this is also the report of Don R. Black, pathologist for Bell Memorial Hospital, University of Kansas (*Jour. A. M. A.*, July 7, 1917, p. 62).

TRINER'S AMERICAN ELIXIR OF BITTER WINE.—The Council on Pharmacy and Chemistry reports that this is a wine to which bitter drugs and laxatives have been added. Though evidently intended for public consumption, it is also advertised to physicians. The composition of this "wine"—some bitter drugs, a laxative and a tannin-containing, constipating red wine—and the advertising propaganda all tend to the continued use of this alcoholic stimulant and thus to the unconscious formation of a desire for alcoholic stimulation. As the medical journal advertisements may lead physicians to prescribe this secret and irrational preparation and thus unconsciously lead to alcoholism, the Council authorized publication of its report (*Jour. A. M. A.*, July 14, 1917, p. 139).

SOME MISBRANDED NOSTRUMS.—The following "patent" medicines have been found misbranded under the federal Food and Drugs Act. The curative claims made for them were misleading, unwarranted and false: Poland Wine Bitters, a wine to which emodin-bearing and other drugs had been added.—Koenig's Nerve Tonic, claimed to be a natural remedy for epileptic fits, etc.—Mrs. Edward's Infant Syrup, a "baby killer" containing morphin and alcohol.—Root Juice Compound, which was not a root juice (*Jour. A. M. A.*, July 14, 1917, p. 139).

THE CRUCIAL TEST OF THERAPEUTIC EVIDENCE.—Torald Sollmann points out that if a patient improves after taking a remedy we do not know that he improved on account of the remedy or as a result of the natural course of the disease or for other reasons. In order that adequate allowance may be made for the natural course of the disease, clinical trials of a medicament should be carried out in one of two ways. The first is the statistical method in which alternate patients receive or do not receive the treatment. This method is usually of value only when a large number of cases are available, and even then it is limited or doubtful because it cannot take sufficient account of the individuality of cases. The second method consists in the attempt to distinguish unknown preparations by

their effects. In this a patient, or a series of patients, is given the preparation which is to be tested, and another preparation which is inactive, or a preparation the effects of which are to be compared with the first. In either case the investigator does not know when he is giving one or the other, and tries to distinguish them by their effects. If one drug is really of value and superior to the other, this "blind" test will surely bring out such efficiency or superiority (*Jour. A. M. A.*, July 21, 1917, p. 198).

TUMORS IN ANILIN WORKERS.—Long exposure appears to result sometimes in the development of tumors of the bladder, with or without the symptoms of chronic anilism. In Germany many such cases have been observed in past years. At the first sign of trouble with urine or bladder in anilin workers, the advisability of careful cystoscopy should be considered (*Jour. A. M. A.*, July 21, 1917, p. 204).

LOW'S WORM SYRUP.—The A. M. A. Chemical Laboratory reports that Low's Worm Syrup, sold by Smith, Kline and French Company, Philadelphia, contains 0.93 Gm. santonin per 100 C.c., or 4.2 grains per fluidounce, and a laxative drug, probably senna. Each drachm (teaspoonful) therefore contains a little more than one-half grain. The preparation, like so many of the worm syrups on the market, is of the usual dangerous santonin-containing type, although no hint is given of the presence of this drug nor any warning that it contains a poison (*Jour. A. M. A.*, July 21, 1917, p. 225).

REDINTOL.—This is a paraffin mixture for the treatment of burns. It is marketed by Johnson and Johnson, New Brunswick, N. J., with the following statement of composition: "Paraffines 95 per cent. combined with Resina Palaquium and Oleum Picis Liquidæ." This means little and probably was so intended. Oleum picis liquidæ is oil of tar and resina palaquium is gutta percha. Simple paraffin would no doubt answer as well as this secret mixture (*Jour. A. M. A.*, July 28, 1917, p. 306).

BOOK REVIEWS

PROGRESSIVE MEDICINE. Volume XX. No. 2. June, 1917. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College. Paper, \$6.00 per annum. Lea & Febiger, Publishers. Philadelphia and New York.

A review of thirty pages on the subject of hernia is given by Coley. Gersten devotes 110 pages to the review of surgery of the abdomen, exclusive of hernia. His summary of gunshot wounds of the abdomen in war is splendid. It should be read and studied by every one having any interest whatever in this subject. Clark's review of gynecology takes up 104 pages, of which one fourth is devoted to the subject of cancer of the uterus. Stengel's review of diseases of the blood, diathetic and metabolic diseases, diseases of the thyroid gland, spleen, nutrition and the lymphatic system, embraces seventy pages, of which more than one third is devoted to diabetes. Much of real value to the general physician can

(Continued on page XIX)

For Your Patient—

At the Seaside: Among the Mountains:
In Vacation Camp

Liquid Petrolatum Squibb

Heavy (Californian)

The heaviest and most viscous Mineral Oil. *Specially refined for internal use.* Essentially different from and superior to all other Mineral Oils, whether of American or Russian origin.

Will prevent the bowel troubles consequent upon change of food, water and environment.

Does not deplete or stimulate the system—is not absorbed—does not disturb digestion—prevents constipation and intestinal toxæmia.

Colorless, odorless, tasteless.

Pure and safe.

On hand at all drug stores in original one pint packages under the Squibb Label and Guaranty.

LIQUID PETROLATUM SQUIBB, Heavy (Californian) is refined under our control and solely for us only by the Standard Oil Co. of California, which has no connection with any other Standard Oil Co.

E. R. SQUIBB & SONS, NEW YORK
Manufacturing Chemists to the Medical Profession since 1864

Hay-Fever Time

The Autumnal type of Hay Fever is here! It will last until frost-time.

For the treatment of this distressing malady these products are confidently commended to physicians:

Adrenalin Chloride Solution.

For spraying the nose and pharynx (after dilution with four to five times its volume of physiologic salt solution).

Supplied in ounce bottles, one in a carton.

Adrenalin Inhalant.

For spraying the nose and pharynx (full strength or diluted with three to four times its volume of olive oil).

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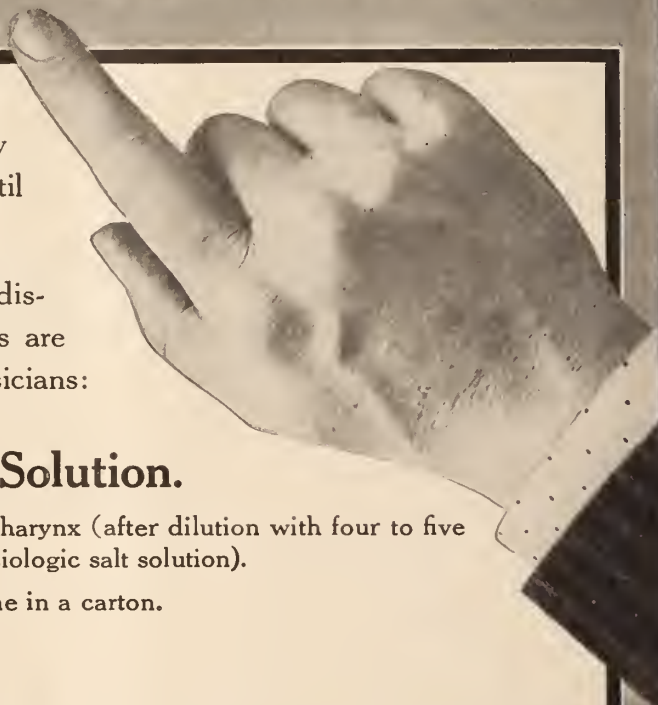
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CONTENTS

ORIGINAL ARTICLES		PAGE		PAGE
A Report on Venarsen in the Treatment of Syphilis.	Frank A. Brayton, M.D., Indianapolis.....	339	Condensed Program	358
Nerve Blocking for the Relief of Genital and Anal Pruritus.	Orvall Smiley, M.D., Indianapolis.....	341	Official Program	358
The Bacteriology of Mastoiditis.	H. K. Langdon, M.D., Indianapolis	342	Scientific Program	359
THE EVANSVILLE SESSION			Report of Secretary-Treasurer	364
General Announcement		347	Report of Committee on Arrangements.....	364
Official Call to the House of Delegates		356	Report of Committee on Scientific Work.....	364
Announcements		357	Report of Committee on Medical Defense.....	364
			Report of Committee on Necrology.....	365
			Report of Committee on Public Policy and Legislation....	365
			Report of Committee on Administration.....	366

NEXT ANNUAL SESSION, EVANSVILLE, SEPT. 26, 27 AND 28, 1917.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

EDITORIALS	PAGE	MISCELLANEOUS	PAGE
Our President	368	Deaths	374
Infantile Paralysis	368	News Notes and Personals	374
The Physician in the Military Service	369	Correspondence	382
Lowering the Standards for the Practice of Medicine and Surgery	369	The Truth about Medicines	382
Medical Students and Hospital Interns in Military Service	370	Book Reviews	384
Editorial Notes	371		

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ORIGINAL ARTICLES

A REPORT ON VENARSEN IN THE TREATMENT OF SYPHILIS

FRANK A. BRAYTON

Senior Assistant, Department of Skin and Syphilis, Bobbs and City Dispensary

INDIANAPOLIS

Venarsen is a widely advertised proprietary, for use in the treatment of syphilis. It is distributed by the Loeser-Smith Company, Chicago, and manufactured by the Intravenous Products Company, Denver, by whom it is claimed to be a "superior spirocheticide for the successful treatment of syphilis." Accompanying venarsen is a descriptive folder in which it is stated: "Venarsen, carrying a high arsenic percentage with a very low toxicity, is especially effective in the treatment of syphilis in 0.7, 1.4 and 2.1 gram doses, . . . and seems to act as a chemo-therapeutic specific in most cases of the disease; . . . its valuable specific action and active tonic and alterative effect make it a most ideal treatment in syphilis and syphilitic affections."

Venarsen has been used extensively in this country during the past eighteen months. This can be explained in part by the shortage in the supply of salvarsan and the eagerness of the medical profession to seize on anything offered as a substitute.

I have had many inquiries regarding the therapeutic value of venarsen. Personally, I know that the drug has been confused with salvarsan, and that in one instance a physician administered it under the impression that he was using American-made salvarsan. I have on several occasions heard the preparation referred to as "Denver salvarsan." I therefore deemed it advisable to use the drug in a series of active syphilitic to determine its therapeutic value, contemplating a report of the results obtained.

Six of the patients on whom treatment was begun did not return after the first two or three injections of the drug had been administered, and it was with difficulty that the cases reported below were held to the treatment.

All cases selected for the treatment showed 100 per cent. positive Wassermann reactions and active clinical manifestations of syphilis. The ten cases reported were given from six to eight injections of venarsen at intervals of two to five days. The initial dose in most cases was small. All subsequent doses, however, were the maximum or 2.1 grams. Routine urine examinations were made prior to the injection of venarsen.

CASE REPORTS

CASE 1.—A. R., white female, age 33. This patient was infected five months before treatment was begun. Examination showed a primary sore, from which spirocheta pallida were shown, condylomata around vulva and anus, annular syphiloderms on the forearms, palmar and volar squamous syphilides, circinate lesions on the chin, mucous membrane involvement of mouth and throat, and a 100 per cent. Wassermann reaction (blood serum) with four antigens. She was given one injection of venarsen (1.4 gm.) and seven injections (2.1 gm.) in sixteen days. No improvement was noticed in the cutaneous lesions and the mucus membrane lesions were slightly worse. The Wassermann reaction was still 100 per cent positive at the end of treatment. All lesions disappeared rapidly under the use of salvarsan.

CASE 2.—F. S., white male, age 40. Infection eight years' duration. Clear history of infection obtained. Wassermann reaction 100 per cent. positive. Has had several attacks of recurrent iritis (luetica). He was given eight injections of venarsen (2.1 gm.) in a period of eighteen days. Atropin sulphate (1 per cent. sol.) was dropped in the eye three times a day. Five days after the beginning of injection, or in the fourth week of the iritis, improvement was shown which was only temporary. The condition became worse again and remained so

until the completion of the treatment. Under salvarsan the iritis rapidly disappeared. This is the only case in which improvement was shown, and this was not necessarily attributed to venarsen.

CASE 3.—L. N., colored female, age 18. Was infected seven months before treatment was begun. Examination showed palmar and volar squamous syphilides, marked adenitis, circinate syphilides of face and chin, so often seen in negroes; severe mucous membrane involvement of throat and mouth, deep ulcerations of uvula and tonsils, laryngitis and a positive Wassermann reaction with four different antigens. Six injections of venarsen were given in a period of sixteen days. The cutaneous lesions had extended and the throat was worse under the treatment. Rapid recovery occurred under the use of mercury salicylate and salvarsan.

CASE 4.—N. W., male, age 28. Infected nine months before institution of venarsen treatment. The patient had received an indifferent mercurial treatment, and at the time venarsen was begun examination showed severe recurrent mucous membrane syphilis of the mouth and condylomata around the anus. The Wassermann reaction was strongly positive with four antigens. Six injections of venarsen, triple strength, were given in a period of twenty-one days. The lesions became worse during the course of treatment. Rapid recovery occurred under the use of salvarsan.

CASE 5.—S. T., male, age 22. Infected fourteen months before venarsen treatment was begun. The Wassermann test was strongly positive with four antigens. Examination showed severe mucous membrane syphilis of the mouth with deep ulcerations of both tonsils, laryngitis which made speech difficult, and dry, scaly, palmar and volar syphilides. Seven injections of venarsen were given in a period of eighteen days. The lesions became worse at the end of the treatment. The throat had become very painful and severe headaches had appeared. Rapid recovery was noticed after the use of salvarsan.

CASE 6.—B. B., male, age 33. Examination showed a primary sclerosa which had been present for three and a half months, mucous patches, a scaly macular eruption over the entire body and scalp and marked adenitis. The Wassermann test was strongly positive with two antigens. Six injections of venarsen were given at three-day intervals. No improvement was noticed at the end of the treatment and salvarsan was instituted, after which the lesions rapidly disappeared.

CASE 7.—E. D., male, age 29. Was infected three years prior to appearance at dispensary. Examination showed recurrent ulcers of anterior tibial area of left leg and a periosteitis of the lower third of the tibia. The Wassermann test was strongly positive. Six injections of venarsen were given. No improvement was

seen, and salvarsan was given, after which there was rapid recovery.

CASE 8.—M. B., female, age 20. Infected eight months prior to appearance at dispensary. Examination showed a very extensive mass of condylomata around the anus and vagina, marked inguinal adenitis, scar on vulva from primary sore, and a light macular eruption over body. The Wassermann test was positive with two antigens. Six injections of venarsen were given in a period of eighteen days. No improvement noted under venarsen. Salvarsan was given and the lesions rapidly disappeared.

CASE 9.—O. D., male, age 24. Infection one year old. Examination revealed scaly syphiloderms of palms and soles, rupial syphilides on body and ulceration of both tonsils. Wassermann test 100 per cent. positive with four antigens. The patient was given six injections of venarsen (1.4 gm. and 2.1 gm. doses) in a period of fourteen days. No improvement was noticed. The lesions disappeared rapidly under the use of salvarsan.

CASE 10.—M. K., female, white, age 22. Examination showed a primary sore on the cervix, a light macular eruption over the body, adenitis and sore throat. Wassermann 100 per cent. positive. *Spirocheta pallida* positive from primary sore. The patient was given four injections of venarsen in a period of nine days. On the eleventh day following the initial injection she returned to the dispensary complaining of extreme weakness and severe headaches. She stated that she had passed urine often and in small quantities for two days. The routine urine examination which was made before each injection of venarsen showed: specific gravity, 1.025; albumin, positive; microscopic, red blood cells and red blood cell casts.

She was taken to the hospital immediately where she recovered in seven days from the nephritis. No improvement was seen from the treatment by venarsen. The eruption was more pronounced and new lesions had appeared in the mouth. Salvarsan was instituted following which there was prompt recovery.

CONCLUSIONS

Nichols,¹ Cole² and others have proven sodium cacodylate to be worthless as a spirocheticide, and yet many physicians are using venarsen in the treatment of syphilis, and venarsen is practically nothing more than sodium cacodylate. The small amount of mercury which it contains could be of no value in the treatment of syphilis.

From the results obtained in the treatment of these ten cases I think I am justified in saying that:

1. Nichols, H. J.: Salvarsan and Sodium Cacodylate, *The Jour. A. M. A.*, Feb. 18, 1911, p. 492.

2. Cole, H. M.: A Study of Sodium Cacodylate in the Treatment of Syphilis, *The Jour. A. M. A.*, Dec. 30, 1916, p. 2012.

1. Venarsen is worthless in the therapy of syphilis.

2. Venarsen has absolutely no spirocheticidal properties, disproving the claim of the manufacturers.

3. Often repeated injections of the maximum dose do not show any favorable effect on the Wassermann reaction.

4. A venous sclerosis was produced in each case in which the drug was administered, due to chemical irritation.

5. Syphilitic lesions of the mucous membrane and cutaneous surfaces progressively became worse during the course of venarsen treatments.

6. Venarsen is a dangerous preparation capable of producing a severe nephritis.

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NERVE BLOCKING FOR THE RELIEF OF GENITAL AND ANAL PRURITUS

ORVALL SMILEY, M.D.

INDIANAPOLIS

The researches of Chatelin and Siccard of France on sacral anesthesia followed by those of Enderle of Berlin and as applied recently by Holland of Christiana to anal pruritus and by myself to anal and genital pruritus have produced excellent results.

By the sacral nerve blocking process I have completely relieved thirteen cases of anal, genital and mixed pruritus.

Two cases of anal pruritus were uncomplicated except by the usual crusting and eczema. Eight cases of the most violent type were complicated by some one or two of the following pathological conditions which were relieved by medical and surgical procedures, namely, hemorrhoids, fistulae, diseases of the crypts of Morgagni, torn down and hypertrophied columns, anal fissures and rectal ulcers, yet the pruritus continued with renewed vengeance in all of them.

In none of the cases, by a careful detailed history and complete physical examination, was I able to find other than these pathological conditions that could be associated with the etiology or causative factor, except varying grades of arteriosclerosis. None of these patients showed sugar in the urine. Habits and diet, together with the local pathological conditions, were relieved and still the pruritus persisted.

There is, as Holland points out, the existence of a vicious circle in all of these cases of pruritus. The intolerable distress produced by the

itching, burning and crusting causes the individual to scratch and claw at the affected area, producing an intense irritation with various degrees of traumatic eczema, excoriation and crusting. These conditions produce intense itching and so the vicious circle is kept up.

In these cases cited above I could find no other means to stop the vicious circle except by blocking the perineal nerves or to do the operation devised by Sir Charles Ball of Dublin, which in a limited way does the same thing surgically by dividing the nerves which supply the anus. This entails the use of an anesthetic, local or general, and limiting the anesthetic to a small area and the associated wound to be taken care of. This method in some suitable cases relieves, but the results are by no means as universally gratifying as is the sacral block method.

When the injections are made there usually follows for ten to eighteen hours an unpleasant sensation of numbness, with a temporary increase of the disturbance with pain. After that there is a rapid cessation of the annoyance to complete relief. In some there is a sudden relief of the disturbance on injection, the itching and burning disappears, and with that the vicious circle stops and allows the irritation to heal.

Most patients require two or three injections, usually given four days apart; one man required the fourth dose. The effect bids fair to be lasting, as in some of the first treated, seven, eight and ten months have elapsed without recurrence.

Three of the cases treated were women with intractable pruritus vulvae which had resisted all other forms of therapy. Two of them were of long standing. All three were promptly relieved by this method. In one four months have elapsed with no recurrence; the others nine and six weeks, respectively. They each required two series of injections four days apart.

In the last ten cases I have used, in order to get away from the headache and giddiness produced by the interforaminal method of Enderle, a modification in that I inject under the fibers of the posterior sacroiliac ligament and fascia outside or lateral to the sacral cornu over the fourth sacral foramen avoiding going down through it, with 20 c.c. of distilled water, containing 0.02 gm. novocain to the side producing considerable pressure. The injection is made slow. By this procedure I produce an analgesic effect on a branch of the pudic and the anterosacrococcygeal nerves, together with some of the communicating branches.

Since using this modification the disturbances

have been much less and the patients not detained so long. However, to avoid danger I feel it is better to keep the patient in bed forty-eight hours.

I know of no class of patients that are so profoundly grateful as those relieved of this torturing, nerve racking condition, and of no other method which offers half the promise.

Before taking up the sacral block method I was, out of a great number of cases, able to grow a pure culture of streptococcus from the tiny breaks in the anal mucous membrane and completely relieve only four by the injection of an autogenous vaccine, but made a miserable failure in a great number. All that I could then do with them was to give temporary relief by the well known applications of which phenol is the principal ingredient.

In the light of our present knowledge of the subject I believe the sacral nerve blocking process offers by far the better solution of this perplexing and tenaciously vicious condition that tortures so many people.

THE BACTERIOLOGY OF MASTOIDITIS*

H. K. LANGDON, M.D.
INDIANAPOLIS

Infection is defined as the successful invasion of the tissues by micro-organisms.

There are four cardinal conditions which influence infection. First, the organism must be sufficiently virulent to overcome the defenses of the body cells; second, the organisms must enter in sufficient number; third, the organisms must enter through appropriate channels; fourth, the susceptibility of the host, or the preparedness of the cells to withstand the invasion.

The mucous membrane of the respiratory tract and the accessory sinuses is at all times the resting place of great numbers of bacteria, but infection does not take place because either the virulence of the organisms is not sufficient, or the cell defenses are strong enough to furnish adequate protection. But let the natural resistance of the tissues be lowered, and how quickly these organisms take hold and establish themselves in newly made trenches, from which it is harder to dislodge them after each attack.

Our body defenses are complicated. The cells are normally equipped with specific protective bodies or antibodies, which under ordinary conditions are sufficient to protect us; but when

the proper stimulus is applied the cells produce these antibodies in vast quantities in an effort to neutralize the toxin.

Another method of defense is provided by the white blood corpuscles, or phagocytes. These cells attack the invading organisms directly before they have an opportunity to form their toxins.

There also are certain histologic and anatomic defenses which aid materially in our natural protection. For instance, the oral and nasal cavities are completely surrounded by a ring of lymphoid tissue known as Waldeyer's Ring. This includes the palatine tonsils, the lingual tonsil, the pharyngeal tonsil, and a small group of lymph-follicles situated on the posterior lip of the eustachian orifice, sometimes called the eustachian tonsil.

Additional defense is provided by the retro-pharyngeal and the lateral pharyngeal glands, the styloid, submaxillary and the superficial and deep cervical glands.

Undoubtedly there must be some reason for such preparedness, and this is easily understood if we take into consideration the almost infinite number of bacteria present in the oral and nasal cavities. No other part of the body offers such a fertile field for the production and growth of bacteria. Over 100 varieties have been identified, and of these at least thirty are pathogenic. The gingival margins alone offer such a good nesting place for bacteria that millions may be found around the best cared for teeth. Some one has very truthfully said that in examining a patient's mouth we must look for coated teeth as well as a coated tongue.

Infection may take place in two ways: by continuity and through the lymphatics. The former is the usual way in this region.

The nose, eustachian tube, middle ear and mastoid cells are all lined with epithelium. This varies somewhat in form, in the different regions, but offers a good route for the transmission of bacteria to the mastoid, which is the particular field in question.

The mastoid cells are lined with a very thin mucous membrane which is continuous with that of the antrum and tympanic cavities, and is very closely adherent to the periosteum. The epithelium here is of a very low non-ciliated squamous variety. Now with millions of bacteria in the oral and nasal cavities and a direct route of communication through the eustachian tube and tympanic cavity into the mastoid antrum and cells, it is evidently due to the adequacy of the natural and acquired body defenses that mastoid and middle ear infections are not considerably more prevalent.

* Part of symposium on "The Mastoid," presented at the Fort Wayne session of the Indiana State Medical Association, September, 1916.

There are other routes by which bacteria may gain entrance to the tympanic cavity. If the tympanic membrane is injured or ruptured, infection may take place through the external canal, or it may enter through the lymph spaces or blood vessels, and finally, through compound fractures of the temporal bone.

The bacteria most frequently encountered in infected mastoids are relatively few: The pneumococcus; streptococcus; the staphylococci; *Bacillus pyocyaneus*; a diphtheroid bacillus; *Bacillus influenzae*, and the true diphtheria bacillus.

Cases are recorded of infection by tubercle bacillus, colon and typhoid bacilli, Friedlander's bacillus, meningococcus, gonococcus, smegma bacillus, and the spirillum of Vincent's Angina, but these are rare.

In a series of cases examined recently I found the pneumococcus most prevalent, appearing in fourteen of the twenty-two cases. Staphylococcus was found in eleven; streptococcus in four; pyocyaneus in two; diphtheria bacillus in one; diphtheroid bacillus in one, and one showed no growth at all.

The streptococcus produces the most violent infection and is closely seconded by the pneumococcus. The other organisms, except meningococcus and *Bacillus influenzae*, are most frequently found in the more chronic types.

Bacteriological findings, then, can be of great value in prognosis and in determining the necessity for surgical procedure.

Bacteriological findings in chronic otorrhea are not very trustworthy because of contamination from without, but the organism grown from the first rush of pus after paracentesis, or immediately after the membrane has ruptured, will usually prove to be the causative organism.

If the streptococcus is found and the inflammation does not rapidly subside after drainage is established, immediate operation is indicated, as the streptococcus causes very rapid destruction of the soft parts and of the bony structure as well. (Streptococcus pus is usually thin and serous.) The inner table of the temporal bone, separating the antrum and meninges, and in the region of the tegmen; also the plate separating the antrum from the facial nerve, are of extreme thinness, and the rapid necrosis produced by the streptococcus and pneumococcus may give an opening into the brain with resulting brain abscess. The pus usually collects in the subdural space, from which it is carried by veins, arteries and lymphatics into the deeper structures.

The peculiar danger of pneumococcus infec-

tion is its liability to recurrence. The infection may apparently subside and the process heal, and these organisms remain inactive until healing is accomplished, then suddenly become active again, producing a reinfection.

The other organisms mentioned must be considered when found; but their consequences are usually not so serious, with the possible exception of *Bacillus influenzae* and the meningococcus.

The bacillus of influenza is a very rare cause of mastoiditis, but when found usually produces a very acute, very active process. This usually occurs as a complication or sequel of an attack of influenza. The vitality of the *Bacillus influenzae* is low, consequently it is usually overgrown and killed by other organisms in middle ear infections.

Another important field opened by correct bacteriological examination is the treatment of these infections by vaccines. After drainage is established, vaccines prove a valuable addition to treatment. In streptococcus infections there often is insufficient time for the preparation and administration of vaccines. In this case, antistreptococcic serum should be used; but the recurrent propensities of pneumococcus infections may be eliminated entirely by vaccines.

Pyocyaneus vaccines in infections in other localities are not very effective, but in middle ear cases give unusually good results.

Many cases of mastoid infection are on record where the discharge persists even after a thorough cleaning of the mastoid cells and antrum. In these cases vaccines will stop the discharge usually very rapidly. In chronic otorrhea, if the invading organism is obtained the discharge is noticeably diminished, if not entirely checked. In chronic mastoid inflammations, or in cases where the cells have not been thoroughly cleaned out and a bony necrosis is present, vaccines are less effective; but when only the soft parts are involved, splendid results can be obtained.

The significance of bacterial findings in middle ear and mastoid infections may be summarized as follows:

The determination of the causative agent indicates usually the gravity of the situation. It has an influence upon the decision for immediate surgical interference, or conservative treatment. It indicates to a certain degree the possibility of complications—recurrence, brain abscesses, meningitis, etc. It gives an accessory method of treatment, which may be the one element necessary for rapid or complete cure.



JOHN H. OLIVER

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CHARLES STOLTZ
CHAIRMAN SURGICAL SECTION
SOUTH BEND



LAFAYETTE PAGE
CHAIRMAN EYE, EAR, NOSE & THROAT SECTION
INDIANAPOLIS



J.M. CUNNINGHAM
SECRETARY MEDICAL SECTION
INDIANAPOLIS



DAVID ROSS
SECRETARY SURGICAL SECTION
INDIANAPOLIS

THE EVANSVILLE SESSION

The Indiana State Medical Association will hold its annual session in Evansville, Wednesday, Thursday and Friday, Sept. 26, 27 and 28, 1917. It has been a long time since the Association has met in Evansville, and the members will appreciate going back to a city that, with reason, boasts of its growth, enterprise, and hospitality.

Evansville, with a population of about 90,000, is tucked away in a natural crescent of the Ohio river which marks the borderland of North and South. Not only in an industrial way but in a social sense is Evansville the gateway to the New South, for from the mills of the North and Northwest a mighty stream of finished products pour through the city by rail and by water, while from the South comes new materials and products needed in the North.

Evansville is rich in history; it is a city of homes, churches, parks, and well-paved and well-lighted streets; has thriving and varied industries; and its citizens stand ready at all times to keep up its reputation as a hostess that is never forgotten.

THE EARLY HISTORY OF EVANSVILLE

The early history of Evansville begins with March 27, 1812, when Hugh McGary, a native of Kentucky and a friend of Daniel Boone, received a deed of several hundred acres of land on which the city is now located. Until the time that McGary bought the land and erected a log cabin, all the territory now occupied by the city of Evansville and Vanderburgh County, and, for that matter, the land now included in Posey and Warrick counties as well, had served merely as a hunting ground for the Shawnees and Miamis. Occasionally French traders from Vincennes made trips to the section to barter with the Indians, and as early as 1806 one Pierre Brouillette, coming down the Ohio, found a hunting party of Shawnees and for four years ran a trading store at the point where Pigeon Creek enters the Ohio River, a spot now in the center of the city.

In the year 1813 it was decided to select a county seat for Vanderburgh County and McGary offered the county 100 acres of his land as a site for the city. On June 14, 1814, the county court ordered the site laid off into lots and McGary named the city Evansville, in honor of Gen. Robert M. Evans, of Gibson

County, a friend of his and one of the most influential men of that section of the state at that time. Four years later, on July 27, 1817, Hugh McGary, General Evans and James W. Jones platted the original city of Evansville, and therefore during July, 1917, Evansville celebrated her one hundredth anniversary.

Even as early as 1818 a great commercial future was predicted for Evansville and for years the city was the most important river trading post between Pittsburgh and New Orleans. Events have proved that Hugh McGary, backwoodsman and fighter though he was, looked far into the future on that Autumn day in 1811 when he tied his canoe to the elm tree and decided to build a home and found a city. Who can say but that even then he saw visions of a jagged skyline, a river bank teeming with activity and the spires and steeples that go to make up the city of today.

EVANSVILLE REAL RECREATION CENTER

Acting on the theory that a city provided with real recreation facilities is a city of satisfied citizens, Evansville has spent and is spending thousands of dollars yearly on parks, free swimming pools and municipal playgrounds. The city has more than 300 acres of park land and more acreage is being added each year. Everything possible in the way of amusement and recreation is provided free by the city.

Garvin Park, a beautiful natural woodsite of ninety acres, has been made into one of the prettiest parks in the state. Nature has been allowed to hold full sway and the artificial effects are arranged in such a manner as to aid nature. This park is equipped with playgrounds, tennis courts, a wading pool and a free swimming pool. A lake, formed by throwing a dam across a natural ravine, furnishes an ideal place for boating during the summer and for skating during the winter.

At the entrance to Garvin Park is located Bosse Field, recognized as one of the finest athletic stadiums in the United States. The stadium was built by the school board of Evansville at a cost of \$75,000. It is oval shaped and a giant concrete grandstand extends half way around the field with a seating capacity of 8,000. A concrete fence encircles the field, which is large enough for a quarter-mile cinder track, a baseball diamond and football field. Bosse Field is used by the schools for all ath-



1. ELKS CLUB. 2. CRESCENT CLUB. 3. MAIN STREET LOOKING EAST FROM THIRD. 4. MASONIC TEMPLE. 5. POLICE STATION. 6. Y. M. C. A.

letic events, is the home of the Evansville Central League ball club and furnishes an ideal place for the staging of outdoor pageants on a large scale.

The drives and walks, laid out in an artistic manner, the vistas, fountains and flower beds all tend to make Garvin Park an asset to Evansville. Old and young take advantage of the many free attractions and make it a gathering place from early spring until late in the fall. Birds and animals are gradually being added to a zoo, which was started recently, and within the next few years this will be an attractive feature.

and other river craft that ply up and down the Ohio. This park also is equipped with free tennis courts, a shelter house and drinking fountains. Shrubbery and flower beds, artistically arranged, make it a spot worth visiting. In the rear of the park is one of the best residence sections of Evansville.

Mesker Park, composed of 110 acres, is a natural woodland site with hills and dales that present a constantly changing view of beautiful scenery. A municipal golf course has been provided by the city in this park and has added to its popularity.

Bayard Park is another beauty spot where



COLISEUM

BEAUTIFIES RIVER FRONT

Many cities, located on navigable rivers, have neglected to make use of the river front as a residence section or have made no effort to beautify it. In this point Evansville has the advantage of the majority of cities along the Ohio River. Sunset Park, composed of fifty acres, for the most part made ground, is one of the prettiest spots in Evansville. It extends along the river for a distance of one mile and averages from one to three blocks in width.

With a cool breeze from the Ohio always sweeping over it, this park affords a delightful resting place during the summer months. It is used as a playground by the children of the neighborhood, while hundreds gather there daily to enjoy the breeze and watch the steamers

every advantage has been taken of nature's gifts. This park borders one of the city schools and municipal playgrounds and provides a recreation center for a large and growing community. Dozens of small neighborhood parks are scattered over the city where the children can gather and play in safety.

FEATURE SWIMMING POOLS

While the city parks take care of Evansville citizens, the city has made a special feature of its free swimming pools and playgrounds. Evansville has eight swimming pools, and three of these are turned over to the public free during the summer months, and the others are available to the great majority of the citizens.

During the summer of 1916 the attendance



1. RESIDENCE OF MANSON GILBERT. 2. WILLARD LIBRARY. 3. RESIDENCE OF CHARLES COOK.
4. WOODMERE. 5. RESIDENCE OF HON. JOHN W. BOEHNE.

at the free pool at Garvin Park was 37,395, and on July 21 more than 1,300 children were taken care of. With competent instructors on hand at all times, the pool, which is fifty feet wide and one hundred feet long, was crowded from early morning until late at night from May 15 until September. At the West Side pool 25,000 were taken care of during the season, and at the High School pool, which was for the use of the girls and women of the city, more than 5,000 were provided for.

The city has seven municipal playgrounds, fitted with various forms of playground apparatus and wading pools. The attendance for the summer at the seven playgrounds is estimated at 70,000, and about the same number were taken care of in 1915. Fifteen municipal tennis courts provide ample room for the dev-

West. The city has twenty-eight public school buildings, and is contemplating the erection of another high school building.

Evansville also is a city of churches, as the spires and steeples can be seen in every section of the city. All denominations are found in Evansville and all have beautiful buildings. The four libraries, three of them Carnegie libraries, are among the best equipped in the state of Indiana.

As Evansville has many citizens of German descent, there are seventeen German societies in the city. Three of these societies have large club buildings, namely the Central Turnverein (Eighth and Gum streets), Liederkrantz-Maennerchor (Second avenue and Division street), and Germania Maennerchor (1316 Fulton avenue). The city is also provided with many



ST. MARY'S HOSPITAL

otees of this sport and the annual city tennis tournament brings the best players of the city together in competition.

EVANSVILLE A CITY OF MANY INTERESTING BUILDINGS

While primarily a manufacturing city, Evansville has not lost sight of the need of artistic building and city planning. The churches, schools, clubs and business buildings are for the most part erected along artistic lines, while some of the structures are considered architectural triumphs.

The Junior High School building, which is provided with a big modern gymnasium, swimming pool, facilities for teaching advanced manual and vocational training and domestic science, is taken as a model by cities all over the country, and the public school system here is considered one of the best in the Middle

other clubs of a social and fraternal order. The Elks Home is one of the best in Indiana, and the Eagles and Owls have buildings of their own. The Crescent Club, located on the river front, is recognized as one of the most beautiful club houses in the state; and other well known clubs are the Press Club, the Country Club and the Motor Club. The Masonic Temple is an imposing building, and there are many other places where visitors are made welcome.

THE HOSPITALS

Doctors always are interested in hospitals, and Evansville points with pride to its accommodations for caring for those requiring hospital accommodations.

St. Mary's Hospital is the oldest of the hospitals in the city, and was first started in the old Marine Hospital in the West End with a corps of three sisters. In 1894 the present



1. U. S. CUSTOM HOUSE AND POSTOFFICE. 2. HOTEL McCURDY. 3. THE WALKER HOSPITAL. 4. EAST SIDE LIBRARY. 5. VANDERBURGH COUNTY COURT HOUSE. 6. OLD STATE BANK AND HOTEL LINCOLN. 7. HIGH SCHOOL.

handsome building was erected on the block at corner of Columbia street and First avenue. At each end of the main building sections are run at right angles, with operating department, dressing and x-ray rooms in a separate addition at the north end. This was constructed about 1902. A large addition is at present being planned and will probably be erected in the near future.

The Protestant Deaconess Home and Hospital was founded in the year 1892. A large



DEACONESS HOSPITAL

frame house was remodeled for the hospital building. In 1897 the present building was erected. This is a large three-story brick building with complete equipment. The old hospital building was moved to the rear of the lot and remodeled for use as a Nurses' Home. In addition to supervision by the Deaconesses, the hospital maintains a training school.

The Walker Hospital is located on Upper Fourth street, and was built in 1894. It is the direct successor of a preceding hospital which was first organized in 1892 by eight physicians. As the work grew, facilities were hampered, and in 1894 Dr. Edwin Walker and the late Dr. A. M. Owen acquired all of the assets of the old hospital and built the new one. In 1898 Dr. James Y. Welborn acquired the stock from the estate of Dr. Owen. The first building had 24 rooms, with accessory departments. The work became greater until 1914, when a three-story, fireproof constructed building with a cross-hall, was erected. This building has no wood-work of any kind except doors and window casings. The first floor is used for medical cases, the second for surgical and the third for maternity and children's department. The operating department is located in the rear on the second floor. The office is a one-story building on the north side, separate from the

hospital, but connected both front and rear with the hospital. In this building are the doctors' offices, the examining and treatment rooms, and very completely equipped laboratory and x-ray rooms where extensive work in both branches is done. The hospital owns the entire block. At present a remodeled residence is used for the Nurses' Home.

The Hayden Hospital was established in 1898. It is situated at 20 Walnut street, overlooking beautiful Sunset Park and the Ohio River, and convalescent patients, from the veranda of this institution, have a view of the park and the Ohio River for several miles. At the present time it has thirty-five beds, but in view of the crowded condition of the hospital at all times, due to inadequate space, the management contemplates the erection of a new addition in the near future. This institution has enjoyed remarkable prosperity since its establishment, due, to a great extent, to a sufficiently large and efficient nursing corps, thus enabling individual care for each patient.

PLENTY OF AMUSEMENTS

In the way of amusement, Evansville offers a varied program. At Cook's Electric Park is to be found figure-eights and dip-the-dips, while bowling alleys, shooting galleries and other concessions interest the visitor. A large open air theater is also used for various entertainments and for athletic exhibitions. During the summer months cabaret singers help to pass away dull moments.



HAYDEN HOSPITAL

The city is well provided with theaters, offering good vaudeville and the legitimate as well as all the best known moving picture releases. The hotels offer amusement at nights in the way of music and informal dances. Another form of amusement always appealing to the inland visitor is afforded by the Ohio River. Large excursion steamers make regular trips



1. ENTRANCE TO BAYARD PARK. 2. RIVERSIDE AVENUE AND SUNSET PARK. 3. BASSE FIELD.
4. COUNTRY CLUB AND GOLF COURSE. 5. GARVIN PARK.

up and down the river, while launches and small boats can be secured at any time.

Evansville is in the Central League of Professional Baseball Clubs, and this league is recognized as the fastest Class B league in existence. For years the city has always had a representative team and the grounds of the local club are alone worth a visit to the park. The Central League season opens during the latter part of April and usually closes during the first or second week in September. Those enjoying baseball will find the brand offered in Evansville compares favorably with that seen in larger cities.

INTERESTING SIDE TRIPS

Not only does the city of Evansville afford amusement and recreation, but there are numerous side trips from this city which appeal to all visitors. Mammoth Cave, located in Butler County, Kentucky, is considered one of the wonders of the world. Tourists from all parts of the world visit it each year. Evansville affords the best starting point for a trip to this great natural wonder.

During eight months of the year boats leave Evansville twice a week for the trip up the Ohio and Green Rivers for Mammoth Cave. One can leave Evansville on a Saturday evening, enjoy a two-day boat ride up one of the prettiest rivers in the country, make a trip through the cave and be back in Evansville the next Wednesday morning. Green River is the longest navigable river in the United States for its width. In many places a small steamer cannot turn around, yet the river is navigable during the entire year for a distance of 206 miles from the point where it empties into the Ohio River. A series of government locks and dams makes this possible.

New Harmony, Indiana, a town famous all over the United States, is only twenty-seven miles from Evansville. Two good automobile roads lead to the city, and it can be reached in an hour by the train. "The New Harmony Movement" is familiar to educators, teachers and others all over the country, while the history of the Rappites, the original settlers, is always interesting. Vincennes, the scene of conflicts between the English and the Indians, and later between the Colonial troops and the English, is known all over the Union and is only fifty-two miles from Evansville. French Lick Springs, rapidly becoming one of the best known as well as one of the most fashionable

resorts in this country, is less than sixty miles from Evansville, and hundreds stop here each year en route to the resort.

EVANSVILLE'S WELCOME TO THE ASSOCIATION

For this year's session of the Indiana State Medical Association, Evansville extends a cordial welcome to all the members of the Association and their friends. Consistent with conditions brought about by the war, nothing will be left undone which will add to the pleasure, comfort, and profit of those who attend. Notwithstanding the fact that many prominent members of the Association are now away serving the country, a scientific program has been secured which is an interesting one, and the Committee on Arrangements has provided social features which will add to the pleasure of visitors and the general success of the session. The ladies especially are invited, and entertainment for them has been arranged for the periods when scientific meetings are in session. The various clubs will be open to visitors, and cards entitling the owners to the privileges of these clubs may be obtained from the Committee on Arrangements. Hospitals, too, will keep "open house" for physicians, and extend a cordial welcome.

PLACES AND TIME OF MEETINGS

The Coliseum Building will be the general headquarters of the Association, and there the members will register. Hotel Vendome, three blocks from Coliseum, will be official headquarters.

On Wednesday evening at 7 o'clock the first meeting of the House of Delegates will be held at the Coliseum Building. The second or final meeting of the House of Delegates also will be held at the same place at 11:30 a. m. on Friday, September 28. All of the section meetings as well as the general meetings will be held in the new Coliseum Building.

ENTERTAINMENTS

The annual smoker and get-together meeting will be held at the Elks' Home on Wednesday evening at 9 o'clock.

On Thursday evening the members of the Association, with their friends and guests, will go on the Steamer Fowler and barge for a moonlight excursion down the Ohio River. There will be dancing and other features of entertainment.

The Committee on Arrangements regrets that it is unable to offer an old fashioned bar-

becue, but has felt that under the conditions of the great war it would not be fitting to prepare as elaborate a luncheon as a barbecue would require.

On Thursday at 1 p. m. the ladies will be taken in automobiles to the historic town of New Harmony, the trip offering an opportunity to see this noted old place with its various points of interest. Luncheon will be served at the Old Tavern, and the return trip be made in time for the evening trains.

REGISTRATION

It is requested that immediately on arrival at Evansville the members of the Association should proceed at once to the registration bureau of the Association in the Public Library office at the door of the Coliseum Building. Registration will be by membership card, and to avoid delays and confusion members are urged to have their cards ready for inspection by the registration committee. Registering members are requested to indicate the number of ladies in the party so that the committee on entertainment of visiting ladies may know early the number to be provided for. Badges will be furnished the members for identification. Letters and telegrams may be sent to the Coliseum Building in charge of the Committee on Registration.

HOTELS

Visitors will find hotel accommodations to suit every taste and purse. Among the hotels are the following:

Hotel Vendome, official headquarters, three blocks from the Coliseum, European plan, capacity 225; rates, without bath \$1.25 to \$1.50, with bath \$1.50 to \$3.00.

Hotel McCurdy, seven blocks from Coliseum, European plan, capacity 300, all rooms with bath; rate \$1.50 and upward.

Hotel Lincoln, three and one-half blocks from Coliseum, European plan, capacity 75; rates, without bath \$1.00, with bath \$1.50 to \$2.00.

Besides these there are numerous smaller hotels and boarding houses affording good accommodations at reasonable rates. The Committee on Arrangements will provide rooms in private families for those who wish to avail themselves of such accommodations, if notified in advance.

Members are urged to make reservations at the hotels and boarding places in advance, and thus avoid the delays and confusion incident to assignment after arrival.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Evansville on Wednesday, Thursday and Friday, Sept. 26, 27, and 28, 1917. On a basis of ratio established by the by-laws ("each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each major fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate") there will be a possible 110 delegates, distributed by counties as follows: Marion County, 6; Allen, Vigo and Lake, each 2; the other eighty-three counties, each 1; the thirteen councilors and the President and Secretary of the Association.

County medical society secretaries must see to it that credentials for the delegates are in the hands of Dr. Allen Pierson, Spencer, Ind., on or before the first called meeting. No delegate will be seated unless wearing the official badge. The House of Delegates will convene promptly at 7 p. m., Wednesday, September 26, at Coliseum Building, and again at 11:30 a. m., Friday, September 28, at the same place.

The order of business will be as follows:

1. Call to order by the President.
2. Roll call and seating of qualified delegates.
3. Reading minutes of previous meeting.
4. Reports of officers: (a) Secretary-Treasurer.
5. Reports of Standing Committees: (a) Arrangements. (b) Scientific Work. (c) Public Policy and Legislation. (d) Credentials. (e) Necrology. (f) Medical Defense. (g) Publication. (h) Administration. (i) Scientific Exhibit.
6. Reading of Communications.
7. Reading of Memorials and Resolutions.
8. Unfinished Business.

Election of officers will be the first order of business Friday morning at 11:30 o'clock. In addition to the regular officers, the terms of the following expire Jan. 1, 1918, and their successors must be elected at this session: Committee on Medical Defense, A. E. Sterne; delegates to the American Medical Association, J. Rilus Eastman, Albert E. Bulson, Jr.; alternates, L. L. Whitesides, W. H. Stemm.

Delegates from counties comprising the First, Fourth, Seventh and Thirteenth districts are reminded that their Councilors' (Drs. Davidson, Stemm, Kitchen and McDonald respectively) terms will expire. They were elected to serve only until Dec. 31, 1917. As this is the last annual session before the new term begins, it is required that these, the before-mentioned districts, elect Councilors for the next three years and present their names at this meeting of the House of Delegates for ratification.

Delegates from the counties comprising the Fifth and Twelfth districts should note that no Councilors were elected at the proper time by their districts, and it would be well, therefore, for them to come prepared to nominate a Councilor in case the Constitution is amended so as to give the House of Delegates power to fill vacancies among the Councilors.

Some very important business will come before this session, a part of which will be introduced by our new executive secretary, Mr. F. E. Schortemeier. It is very much desired to have a full attendance of the delegates of the different counties.

Under the head of "Unfinished Business" will come the following amendments to the Constitution, which were presented at the last annual session at Fort Wayne, Sept. 29, 1916, and are to appear before this session for final action, namely, amend Article 5 to read as follows:

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies, (2) the Councilors, (3) the last three ex-presidents, and (4) ex officio, the president and secretary of the Association.

Article 9, Section 4, to read as follows, adding the words: "and provided further, that if a councilor district society fails to meet to elect its councilor, the councilor for said district shall be elected by the House of Delegates."

Article 11, concerning the annual dues to the Association, to be amended to read \$4 instead of \$2.

First meeting of the Council Wednesday, September 26, at 5:30 p. m., at Coliseum Building.

Next meeting at 2 p. m., Friday, same place. Additional meetings at the call of the chairman of the Council.

ANNOUNCEMENT OF THE COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association:

GENTLEMEN: It has been enacted into a law of the Association that the credentials of delegates be in the hands of the Committee on Credentials before the first day of the annual session; this for the purpose of preventing confusion and for saving the time that should be wholly occupied otherwise in the business of the House of Delegates.

It is hoped that the secretaries of the county societies will see to it that this law is observed; that in the interval between the publication of this report and the first day of the Evansville session those who have not already done so will forward the names of their delegates.

ALLEN PIERSON, Spencer, Ind.,
Chairman of Committee on Credentials.

ANNOUNCEMENT OF COMMITTEE ON SCIENTIFIC WORK

It is considered desirable to admonish essayists and discussants to be brief and to keep within their subjects; furthermore, to be prompt to the end that the program may be completed duly. The committee also wishes herewith to call attention to the importance of communication between essayists and their discussants previous to the session. If possible, copies of papers should be submitted to the appointed discussants. The presentation of illustrative cases will add much to the value of the essays.

Very respectfully,

DAVID ROSS, Chairman.

J. M. CUNNINGHAM.

E. M. SHANKLIN.

CHAS. N. COMBS, Ex-officio.

ANNOUNCEMENTS

The moonlight excursion down the Ohio river Thursday evening promises to be a very delightful function, and tickets for the members and their friends will be provided at the time of registration.

The members and those accompanying them are requested to register on their arrival. The Bureau of Information and Registration is in the Public Library office at the door of the Coliseum building. Present your membership cards when registering. Members without their cards may register after their standing has been verified by consulting the records.

The ladies are cordially urged to participate in the automobile trip to New Harmony at 1 o'clock on Thursday afternoon. This quaint old town has many historic points of interest which will be visited, luncheon enjoyed at the Old Tavern, and the return trip will be made in time for the evening trains.

Members are reminded that they are required to designate under which section they wish to enroll, namely: Surgical, Medical, or Eye, Ear, Nose and Throat; but indicate one section only. You are requested to wear the official badge, which is supplied when you register, when attending or participating in the section meetings.

The election of officers will be the first order of business at the meeting of the House of Delegates held in the Coliseum building Friday at 11:30 a. m. No member of the House of Delegates is eligible to office, and delegates to the A. M. A. must have been members in good standing of the A. M. A. for the past two years.

Essayists should bear in mind that their papers as presented at the Evansville session represent copy for THE JOURNAL, and accordingly the title and full name and address of the essayist should appear at the top of the manuscript, and the body of the manuscript should be carefully edited. Attention to paragraphing, punctuation, capitalization, and grammatical construction of sentences will go a long way toward helping the editor and the printers. All manuscripts should be typewritten.

CONDENSED PROGRAM

Wednesday, September 26

AFTERNOON

Meeting of the Council at 5:30 p. m. at Coliseum.

EVENING

Meeting of House of Delegates, Coliseum, 7 p. m.
Informal Smoker, Elks' Home, 9 p. m.

Thursday, September 27

FORENOON

General meeting, Coliseum, 8:30 a. m.
Meeting of Section on Eye, Ear, Nose and Throat, Coliseum, at 11 a. m.
Meeting of Section on Medicine, Coliseum, 11 a. m.
Meeting of Section on Surgery, Coliseum, 11 a. m.

AFTERNOON

Automobile trip for ladies to town of New Harmony, visit to various historic points, luncheon at Old Tavern, 1 p. m.

Meeting of Section on Eye, Ear, Nose and Throat, Coliseum, 2 p. m.

Meeting of Section on Medicine, Coliseum, 2 p. m.

Meeting of Section on Surgery, Coliseum, 2 p. m.

EVENING

Moonlight excursion on Steamer Fowler and barge up the Ohio river, with dancing and other features of entertainment.

Friday, September 28

FORENOON

All section meetings, 9 a. m., at Coliseum.
Meeting of House of Delegates, 11:30 a. m., Coliseum.

AFTERNOON

Meeting of Council, 2 p. m., Coliseum.

OFFICIAL PROGRAM OF THE INDIANA STATE MEDICAL ASSOCIATION

TO BE HELD AT EVANSVILLE,
SEPT. 26, 27, 28, 1917

HOUSE OF DELEGATES

First meeting, Coliseum, Wednesday evening, September 26, at 7 p. m.

Second meeting, Coliseum, Friday morning, September 28, 11:30 a. m.

COUNCIL

First meeting, Wednesday, September 26, Coliseum, 5:30 p. m.

Final meeting, Friday, September 28, Coliseum, 2 p. m. Additional meetings are at the call of the President of the Council.

GENERAL MEETINGS

(COLISEUM)

Thursday, September 27, 8:30 a. m.

SECTION ON MEDICINE

(COLISEUM)

Thursday, September 27, 11 a. m.

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

SECTION ON SURGERY

(COLISEUM)

Thursday, September 27, 11 a. m.

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

SECTION ON EYE, EAR, NOSE AND THROAT

(COLISEUM)

Thursday, September 27, 11 a. m.

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

ENTERTAINMENTS

Wednesday, September 26, 9 p. m., Smoker at Elks' Home.

Thursday, September 27, 1 p. m., automobile trip for ladies to town of New Harmony, visit to historic points, luncheon at Old Tavern, and return in evening.

Thursday, September 27, 8 p. m., moonlight excursion on Steamer Fowler and barge up the Ohio river, with dancing and other features of entertainment.

SCIENTIFIC PROGRAM

GENERAL MEETINGS

(COLISEUM)

Thursday, 8:30 to 11 a. m.

Organization.

Address of Welcome.

Address of President, DR. JOHN H. OLIVER, Indianapolis.

PAPERS

1. Symposium: Diseases of the Gallbladder.

a. DR. A. C. KIMBERLIN, Indianapolis.

Subject: Diagnosis.

Abstract.—Always an infection carried through the blood or lymph stream, hence is often of foreign origin. Gallbladder the most frequently infected organ in the upper abdomen. Primarily latent, and essentially chronic. Diagnostic importance of clinical history. Symptomatic history variable and often misleading. Physical signs frequently lacking. Laboratory and Roentgen-ray methods, while most helpful, should be carefully checked by the clinical history and physical signs.

b. DR. CHARLES R. SOWDER, Indianapolis.

Subject: Medical Treatment.

Abstract.—Prophylactic treatment. Treatment of acute conditions. Treatment of chronic conditions. Dietetic and medicinal treatment.

c. DR. H. H. MARTIN, LaPorte.

Subject: Surgery of the Gallbladder; A Review.

Abstract.—Galen's teachings regarding the liver, while in the main erroneous, were accepted and followed for nearly fourteen centuries. Not until dissections of the human body began to be more generally practiced in the latter part of the sixteenth and the early seventeenth century were Galen's theories overthrown.

Gallbladder surgery dates back to 1687 when there was recorded the first removal of gallstones, this as a result of accidental injury. From 1687 to 1867 the gallbladder had been attacked surgically by a few men and their accomplishments recorded. Bobb's operation, that of cholecystotomy, in 1867, is the first authentic accepted record that we possess of a premeditated cholecystotomy.

To Langenbach should be given the credit of establishing gallbladder surgery on a sound basis. The theory maintained at that time, 1882, that the diseased gallbladder was responsible for the formation of gallstones, therefore necessitating its removal, was soon discarded for the one holding that the infected bile was responsible for the formation of stones, and therefore cholecystotomy was claimed by many to be the operation necessary for the correction of this pathologic condition. This theory was quite persistently followed by the majority of surgeons until Rosenow published the results of his investigations on infections of the gallbladder tract which proved quite conclusively that these infections take place through the general circulation.

d. DR. H. A. DUEMLING, Fort Wayne.

Subject: Cholecystectomy vs. Cholecystotomy.

Abstract.—Experience has taught that simple drainage will cure but a limited per cent. of cases, therefore many surgeons have been forced to abandon the operation of cholecystotomy as the operation of choice, and to practice cholecystectomy in the large majority of cases.

Cholecystostomy. Cholecystotomy. Evolution of cholecystectomy. Indications for simple incision and drainage. Indications for cholecystectomy. Technic of ectomy. The "T" tube. Recurrence in stone disease. The rôle of adhesions about gallbladder, pylorus and duodenum. Résumé of one year's gallbladder and duct cases.

Leaders in discussion: Dr. W. A. Fankboner, Marion; Dr. Thomas B. Noble, Indianapolis.

SECTION ON MEDICINE

(COLISEUM)

Thursday, 11 a. m.

1. DRs. KARL R. RUDELL and SCOTT EDWARDS, Indianapolis.

Subject: Some Observations on the Causes of Postoperative Nephritis.

Abstract.—In this paper the relative importance of ether anesthesia and focal infection as causative factors in postoperative nephritis are considered.

As a basis of study a critical consideration of five hundred cases was made, including the examination of pre- and postoperative urines, both from a chemical and bacteriologic standpoint.

The close relationship of kidney derangements and focal infection for relief of which surgery was instituted was very noticeable.

The conclusions drawn are that the severe types of postoperative kidney disturbances are most generally present in those cases in which the surgery is done on infected tissues or where there is infection present in the body fluids at the time.

Leaders in discussion: Dr. H. O. Mertz, LaPorte; Dr. Virgil R. Moon, Indianapolis.

2. DR. C. E. SELLERS, Hartford City.

Subject: Infections of the Urinary Tract in Infants and Children Due to *Bacillus Coli Communis*.

Abstract.—After reviewing the early and late literature on this infection of the urinary tract the author concludes with most other writers that pyelocystitis due to the colon bacillus is not a rare affection. It occurs more often in the female, principally because of the peculiar anatomic relation of the lymphatics and the close proximity of the rectum, vagina and urethra. That the male is more often affected than we are accustomed to believe. That this affection is too often overlooked by the general practitioner as well as the pediatricist. That pyelocystitis is not a rare affection of adults, especially those patients who have some chronic pathologic lesions connected with the intestinal tract. Probably a great percentage of pyelitis of pregnancy owes its origin to infancy and early childhood.

That the ascending route infection should not be abandoned, but that the blood stream infection, is in our present enlightenment of focal infections the more probable.

He feels justified in advancing the theory that acidosis plays a very important factor in increasing the virulence of the colon bacillus, basing the proof of this contention on the fact that probably 50 per cent. of his cases gave a very clear history of repeated attacks of acidosis and suffered from some of the various forms of malnutrition.

He feels that the therapy of this affection has been most disappointing, especially as to the use of hexamethylcnetetramin and vaccines, but that we have a very promising remedy in the use of alkalies and guaiacol.

Leaders in discussion: Dr. O. N. Torian, Indianapolis; Dr. L. P. Drayer, Fort Wayne.

Thursday, 2 to 5 p. m.

1. DR. W. H. FOREMAN, Indianapolis.

Subject: Chronic Constipation, Etiology, Types, and Treatment.

DR. WALTER E. PENNINGTON, Indianapolis.
Lantern Slide Demonstrations.

Abstract.—The large per cent. of cases of chronic constipation are hypertonic rather than atonic as is commonly supposed. Most frequently we find the so-called dyskenetic or mixed type in which there is atony and dilatation of the proximal colon, with spasticity and hypertrophy of the distal colon. This type is frequently associated with appendical and ileocolic valve changes, cecal stasis and intestinal toxemia. A small per cent. of cases may be due to mechanical interference, such as kinks, bands, extraneous pressure, etc.

In studying the etiology of chronic constipation consideration must be given to the normal and pathologic anatomy and physiology of the gastro-intestinal tract and related organs; to psychical and reflex influences and faulty habits.

Rational treatment must be based on etiology and type. Only general principles of treatment can be stated. Every case should be thoroughly studied before advising as to treatment. Most cases can be cured by medicinal measures; some can only be temporarily relieved; a few require surgical assistance.

Leaders in discussion: Dr. W. R. Davidson, Evansville; Dr. H. H. Wheeler, Indianapolis.

2. DR. J. G. JONES, Vincennes.

Subject: Headache as a Symptom.

Abstract.—1. Introduction. 2. Headache as a symptom rather than as a disease. 3. Analysis of character of head pains. 4. Location of head pains. 5. Deduction of etiology by elimination. 6. Conclusion.

Leaders in discussion: Dr. Allen Pierson, Spencer; Dr. Charles S. Bond, Richmond.

3. DR. H. K. LANGDON, Indianapolis.

Subject: What Do You Know About Syphilis?

Abstract.—Physicians in general do not realize their responsibility in treating syphilis.

To control this disease the physician and society must collaborate, but the treatment of the individual case is the physician's task. He must know exactly what he is doing and why he is doing it.

Each case is a separate problem and must be studied as such.

The spirochete cannot enter an unbroken surface, so an abrasion is necessary, but may be microscopic in size.

When the spirochete has entered the epithelium it grows slowly until acclimated, then rapidly involves connective tissue, blood and lymph channels. The futility of excising a chancre is thus shown.

The disease may be aborted by vigorous treatment if begun during the first two weeks of the chancre.

A discussion of the diagnosis and treatment of lues in all stages follows, with particular stress laid on syphilis of the nervous system.

Leaders in discussion: Dr. Frank S. Crockett, Lafayette; Dr. W. P. Garshwiler, Indianapolis.

4. DR. W. A. GECKLER, Terre Haute.

Subject: Phthisiogenesis and Its Relation to the Present Classification of Tuberculosis.

Abstract.—Importance in knowing the genesis of the different form of tuberculosis, both for classification of cases, prognosis and treatment.

1. Primary tuberculosis of children with regional gland involvement, a definite clinical entity and diagnosable condition.

2. Involvement of bronchial glands in adults, presenting similar picture to that of children, also a definite clinical entity. Later tuberculous manifestations have the bronchial glands as their starting point.

3. Bronchogenic metastases give rise to (a) pleural tuberculosis or (b) phthisis pulmonalis.

4. Hematogenous metastases may result in incompletely, i. e., localized, or completely generalized, i. e., miliary tuberculosis.

5. Extension from bronchial glands along the lymph channels in the lungs gives rise to peribronchial, interstitial tuberculosis, a rather uncommon but usually benign condition.

Coordination of careful history, clinical observation, laboratory data, physical examination and Roentgen-ray examination necessary for proper diagnosis. Suggestions for a classification based on the above.

5. DR. W. D. HOSKINS, Indianapolis.

Subject: Tuberculosis in Children.

Abstract.—The next step in the fight against tuberculosis is a recognition by physicians and parents that tuberculosis is a disease of infancy and childhood.

In early life the symptoms of tuberculosis are not those of the respiratory tract, but are disturbances of digestion and nutrition. Demonstrable lung involvement means advanced tuberculosis. Prompt recognition of the significance of these disorders of nutrition in children, with proper care and feeding, will save many deaths from tuberculosis.

Leaders in discussion: Dr. Fred A. Tucker, Noblesville; Dr. Alfred Henry, Indianapolis.

Friday, 9 a. m.

1. DR. FRANK E. ABBETT, Indianapolis.

Subject: A Plea for More Conservative Obstetrics.

Abstract.—The purpose of this paper—an appeal especially to the general practitioner and surgeon for the development of a keener sense of obstetrical judgment. Obstetrics unsupported in this community as an exclusive specialty. The successful obstetrician must possess certain essential personal attributes. Vigilance and patience coupled with sound judgment and knowledge of the subject. Safeguarding the parturient from the time she comes under observation until involution is complete. Scientific delivery and final inspection and examination eight weeks after delivery. Importance of the patient placing herself early under the doctor's care. The importance of conservative judgment in early diagnosis of pregnancy for pathology in the pelvis. Rigid examination and conservatism urged. Nearly 75 per cent. of private cases delivered in hospitals today are abnormal. Too much interference with labor on the part of the accoucheur. Oftentimes the patient's nerves are exhausted by the strange conglomerate proceedings preparatory to delivery. More conservatism urged at this time with patient. Watchful waiting for nature to do her share in the delivery. The demoralizing effect of cesarean section on the mind of the mother as regards future conceptions, more important than the dangers to the life of the mother or babe.

Case illustrating the desire and acquiring of an abortion in a pregnancy following a seemingly unnecessary cesarean operation. The conservative treatment of albuminuric cases urged where it is possible. The normal wrong of indiscriminate cesarean section. Gas air analgesia spoken of as a factor in the re-

development of patience, that very necessary attribute in the successful obstetrician. Let us equip ourselves to do better obstetrics and aid nature at the proper time with skilled conservative action.

2. DR. FRED R. CLAPP, South Bend.

Subject: Birth Injuries.

Abstract.—The intermediate repair of birth injuries. Classification of maternal birth injuries. Results of immediate repair. Question of infection, mode of infection. Maternal morbidity resulting from birth injuries. Results of failure to repair or unite anatomy of the perineum with reference to birth trauma. Time to repair condition of tissues on 5th or 6th day. Post-partum cervical lacerations and their repair. Technique of immediate repair. Results compared with the immediate repair. Attitude of patient to intermediate repair. Upsetting of time-worn custom. Conclusions.

Leaders in discussion: Dr. Hugh A. Cowing, Muncie; Dr. Charles E. Ferguson, Indianapolis.

3. DR. GEORGE S. BOND, Indianapolis.

Subject: The Clinical Significance of Cardiac Symptoms and Signs.

Abstract.—The necessity of examining comparatively normal men often raises the following question: How should one interpret cardiac symptoms and signs, and how much significance is to be attached to them? This paper reviews some of the recent facts that have been presented along these lines.

Cardiac sensations. Pain and palpitation. Physiology must be understood. The same symptom complex produced by many causes. Compare cardiac and gastric pain. Clinical significance depends on the cause.

Dyspnea, cyanosis, overfatigue on exertion—indications of circulatory failure, but also may be from extracardiac causes.

Tachycardia may indicate myocardial disturbance or simply cardiac irritability.

Changes in rhythm, cardiac irregularities: Analysis distinguishes between the serious and trivial.

Percussion of the heart. Accuracy of percussion. Errors that arise. Relation of heart size to its functional efficiency.

Heart sounds and murmurs. Do they indicate cardiac lesions? What bearing do they have on the individual's general status?

Leaders in discussion: Dr. Frank B. Wynn, Indianapolis; Dr. J. H. Clark, Connersville.

4. DR. CHARLES E. COTTINGHAM, Indianapolis.

Subject: Occupational Neuroses of a New Type, with Report of Cases.

Abstract.—Occupational neuroses becoming more frequent because of multiplication of machinery and invention. In general their cause is the continuous performance of the same operation employing the same group of muscles without proper relaxation or change in work.

The symptoms in general are pains, neuritis anesthesias, cramps, paresthesias especially acroparesthesias.

There can be no cure so long as the patient pursues the same occupation in the same manner as when the disease was produced. They can be prevented by doing at least two different things employing two entirely different sets of muscles and alternately working at each for a given period. Recently the author has examined seven cases of an entirely new type that present symptoms of such serious nature as demand investigation by the state and proper protection should be extended to the men afflicted. This is a disease

produced among stone cutters using the air or percussion hammer. It is stated there are more than 300 persons afflicted by this disease in Indiana. The prominent symptoms are: first swelling of the hands, especially in beginning the use of the hammer; second, vasomotor changes. The hands become white on exposure to cold, etc.; third, loss of sensibility. This loss of sensibility in hands can be shown to be present. This loss is to tactile, temperature and pain sense. They show this loss by their tolerance of electricity. They could tolerate 90 volts of the combined galvanic and faradic current without pain. The meter showed but little electricity went through their hands. Fourth, pain endured. They all complained of severe pains in hands manifested in different manners. They also complained in different manners of loss of sleep, loss of weight, worry and various fears, etc. Difference in blood pressure shown when working and not working.

Leaders in discussion: Dr. C. F. Neu, Indianapolis; Dr. John R. Pearson, Bedford.

SECTION ON SURGERY

(COLISEUM)

Thursday, 11 a. m.

1. DRS. W. N. WISHARD and H. G. HAMER, Indianapolis.

Subject: Prostatic Hypertrophy.

Abstract.—Gradually increasing frequency of urination, particularly at night, in a man past 50, should suggest prostatic hypertrophy. Rectal palpation and the use of the catheter, supplemented by cystoscopy, render diagnosis fairly exact.

Palliative treatment usually becomes preparatory treatment for removal of the growth. Early operation is advisable before permanent bladder and kidney changes have taken place. Prostatectomy is seldom an emergency operation. Temporary relief can usually be given, and operation undertaken whenever conditions are favorable. Suprapubic operation is the one of choice. Hemorrhage is controlled by the use of the Hagner bag, the value of which has been increased by the wire anchor devised by the writer. Results of suprapubic operation are good, in that restoration of bladder function is accomplished and the operation is attended with less danger to other structures and there is less interference with other functions. It has fewer complications and is more certain of cure.

2. DR. CHARLES M. MIX, Muncie.

Subject: Is Prostatectomy an Operation for the General Practitioner?

Abstract.—The enlarged prostate a common ailment of old men. Analogy of prostate and uterus. Not a hypertrophy but a true tumor formation similar to uterine fibroids. Clinical symptoms. Stages. The rôle of distention of the bladder and back pressure in damaging kidneys. Pain, loss of sleep and progressive kidney degeneration with the addition of an infected urinary tract the factors that cause death. Surgical interference. Perineal route is gradually being discarded for the suprapubic. Reasons. Technique. Factors of safety. Simplicity. Factors of safety and success. Two stage operation. Kidney function. General improvement in health the real guide as to the time for final stage of operation. General impression among laity and physicians that the operation is very dangerous. Reason. Need of reeducation along this line. A safe operation, available for the average surgeon.

Leaders in discussion: Dr. W. S. Ehrich, Evansville; Dr. Charles E. Barnett, Fort Wayne.

Thursday, 2 to 5 p. m.

1. DR. B. F. KUHN, Elkhart.

Subject: Operative Treatment of Uterine Displacements.

Abstract.—Believing the percentage of failures in operations for uterine malpositions is much higher than it should be, and believing this to be due to error of judgment in selecting the kind of operation suitable for each particular case, the writer has attempted to bring up for discussion the various factors that should guide us in making our decision.

Leaders in discussion: Dr. A. C. MacDonald, Warsaw; Dr. Joseph H. Weinstein, Terre Haute.

2. DR. W. D. GATCH, Indianapolis.

Subject: Technic of Operations on the Thyroid.

Abstract.—Pathologic classification of goiter. Gross and histologic pictures. Clinical manifestations of cancer of the thyroid. Difficulties in distinguishing between cancer and adenomas of the thyroid even by microscopic examination. Toxic symptoms from adenoma of the thyroid. Adrenalin skin reaction of Emil Goetsch. Prognostic significance of mania in hyperthyroidism. Evil effects of iodine or thyroid extract medication on supposed nontoxic goiters. Advantages of bilateral resection for simple goiters. Subtotal thyroidectomy in toxic goiters. Analysis of author's cases.

Leaders in discussion: Dr. Miles F. Porter, Fort Wayne; Dr. Charles Marvel, Richmond.

3. DR. JOSEPH RILUS EASTMAN, Indianapolis.

Subject: Treatment of Abdominal Wounds in War.

Abstract.—The present war has witnessed important development in the department of gunshot abdominal wounds. In previous wars it has been held as a dogma that gunshot injuries of the abdomen should be treated conservatively as distinguished from the teaching of prompt operation in civil practice.

The old plan of "Rest and Opium" still has some advocates but the weight of opinion is in favor of applying in military practice the civil method of immediate operation (within twelve hours) in all penetrating wounds of the abdomen, wherever the favorable conditions of civil practice can be provided, including a skilled operator, trained assistants, a sufficient armamentarium, and last but not least, an aseptic environment.

Before operation is undertaken simple nonpenetrating injury of the abdominal wall must be considered intelligently and excluded, likewise, the question of whether conservative treatment under similar circumstances relating to the wound, the patient's general state and surrounding conditions, would not be better. The rule of the present war to operate in penetrating abdominal wounds does not apply unless conditions are favorable for good operating.

No attempt should be made to move the patient unless unavoidable, nor should he be permitted to move himself. If moved before operation the Fowler position should be maintained during transport.

Leaders in discussion: Dr. Murray N. Hadley, Indianapolis; Dr. Thomas M. Jones, Anderson.

Friday, 9 a. m.

1. DR. GOETHE LINK, Indianapolis.

Subject: Appendicitis, a Surgical Disease.

Abstract.—Appendicitis is so common that it is always an appropriate topic for discussion. In most communities physicians make an early diagnosis and act promptly.

A review of Moschovitz' recent work is given:

1. "The pathologic lesion of acute appendicitis represents a suppurative process from the very beginning.

2. "The changes associated under the name 'chronic' appendicitis are pathogenetically the healed products of the acute lesion."

These facts dispose of the medical treatment of appendicitis. If every diseased appendix could be removed while the disease is still "in the original container" there would be practically no mortality from appendicitis.

A study of the writer's personal experience is made. It is shown that the best results are obtained, in suppurative cases, when operated in a hospital. Home operations are decried. Early diagnosis and early operation are urged. Operative technic and post-operative treatment are considered.

Leaders in discussion: Dr. O. D. Hutto, Kokomo; Dr. Frank H. Jett, Terre Haute.

2. DR. J. W. SLUSS, Indianapolis.

Subject: Tuberculosis of the Cecum.

Abstract.—Tuberculosis of the cecum far more frequently than has been suspected is a primary infection. Ordinarily it is held to be secondary to pulmonary involvement.

The predisposing factors are (1) the tubercular diathesis; (2) the mode of life, particularly habits of diet; (3) the anatomical arrangement at the ileocecal junction.

The disease begins as an ulcerative process in the mucosa. It terminates as a remarkable hypertrophy of the whole organ, due to the inflammatory hyperplasia. The final stage, locally, is contracture and stenosis.

The mesenteric lymph nodes are always affected and usually in great degree.

The symptoms in the beginning are those of mild, recurring appendicitis. Gastric attacks, alternating periods of constipation and diarrhea, and umbilical pain occur. In the terminal stage it is usually mistaken for carcinoma and, even at the operation, it may be difficult to determine which disease exists.

In the terminal stage the sole treatment is operative.

Leaders in discussion: Dr. James A. Dimmen, Fort Wayne; Dr. W. H. Stemm, North Vernon.

3. DR. H. K. BONX, Indianapolis.

Subject: Coagulen—Kocher-Fonio.

Abstract.—Coagulen was introduced into our therapeutics by Kocher and Fonio and is a physiologic styptic. This preparation is a sugary, brownish-red powder, free from albumin, which contains the heat resisting substances in animal blood causing coagulation. Coagulen is obtained by fractional centrifugation and consists solely of blood platelets.

Preparation and dosage of coagulen for oral, subcutaneous and intravenous use. Methods and indications of the application of coagulen. Coagulen usage at the operating table—Fonio's technic. Conclusions of Fonio. Case reports.

Leaders in discussion: Dr. Louis F. Ross, Richmond; Dr. Henry R. Alburger, Indianapolis.

SECTION ON EYE, EAR, NOSE AND THROAT

(COLISEUM)

Thursday, 11 a. m.

1. Chairman's Address: DR. LAFAYETTE PAGE, Indianapolis.

Subject: The Problem of Prevention of Blindness and Deafness in the State.

Leaders in discussion: Dr. A. E. Bulson, Jr., Fort Wayne; Dr. Joseph Maurer, Marion.

2. DR. J. W. IDINGS, Lowell.

Subject: Complications and End Results of Tonsillectomy and Adenectomy.

Abstract.—The operation has become so common that many physicians as well as the laity consider it of trivial importance. The necessity of thorough examination and preparation of the patient before operating is as necessary as in abdominal surgery.

Indication for removal may be divided into local and general.

Local.—Repeated acute attacks of inflammation, infection of ears, nasal passages or surrounding structures. Size is no criterion. The small tonsil may be the greatest offender.

General.—Arthritis and nephritis are probably the most common results of acute infection. Many other systemic diseases may cause the tonsil to be searched for evidence of infection and if found demand their removal.

Results of Operation.—Adenectomy gives such immediate relief from mouth breathing, nasal and aural infections as to need no comment.

Tonsillectomy.—The relief of local and systemic inflammation and improvement of general health of individual are most gratifying in many cases.

Complications.—Most dreaded and immediate is hemorrhage. General infection may also follow the operation, infarct and infection of the lungs, pneumonia, infection of middle ear, pharyngeal abscess, mutilation of the pillars and soft palate, followed by contraction of tissues are the result of unskilful operations and may cause permanent change of the voice.

It should be impressed on the public that the operation requires skill and should be undertaken with the care and caution as any major operation.

Leaders in discussion: Dr. G. W. Spohn, Elkhart; Dr. M. Ravdin, Evansville.

Thursday, 2 to 5 p. m.

1. Address: DR. NORVAL H. PIERCE, Chicago.

Subject: The Static Labyrinth in Health and Disease.

Leaders in discussion: Dr. W. S. Tomlin, Indianapolis; Dr. J. D. Heitger, Bedford.

2. DR. GEORGE F. KEIPER, Lafayette.

Subject: The Tests Used to Detect Malingering.

Abstract.—Importance of detecting malingerers, especially at this war-time conscription period.

General Proposition.—The malingerer is always a liar, with all the limitations possessed by liars.

General Principle Involved.—To make the person examined see or hear against his or her own will.

The astute cunning displayed by some, yet always detectable. They fail to lie enough.

The tests, subjective and objective, for simulated blindness: unilateral, or unocular, binocular.

The tests for simulated deafness either unilateral or bilateral. The apparatus used. The apparatus demonstrated.

Leaders in discussion: Dr. E. M. Shanklin, Hammond; Dr. W. H. Field, Evansville.

3. DR. J. D. HEITGER, Bedford.

Subject: The Application and Interpretation of the Newer Ear Tests.

Leader in discussion: Dr. D. W. Layman, Indianapolis.

4. DR. W. A. HOLLIS, Hartford City.

Subject: Streptococcus Infection of the Nose and Throat.

Abstract.—Streptococci are plesimorphous microorganisms. They may normally inhabit the nose and throat of healthy individuals and do no harm; may under certain conditions become of the most virulent types. Epidemics begin abruptly and end gradually.

Source of infection not always to be determined. Infected milk and ice cream has been held responsible in some instances.

Usually begins with sore throat varying from slight redness, with or without exudate, to most malignant. Angina sometimes impossible to distinguish from true diphtheria, except bacteriologically.

Constitutional symptoms and complications all out of proportion to local manifestations.

Compared with the number of infected individuals, sinus complications few, unless previous sinus diseases.

Healthy sinus membrane will inhibit growth of microorganisms by action of cilia and secretion of glands situated in mucosa.

Diseases formerly thought to be due to other causes, now found to be in the different types of streptococci.

Leaders in discussion: Dr. W. F. Clevenger, Indianapolis; Dr. J. W. Hadley, Frankfort.

Friday, 9 a. m.

1. DR. B. J. LARKIN, Indianapolis.

Subject: A Survey of the Trachoma Situation in Indianapolis.

Abstract.—The number of trachoma cases reported to the health department in the spring of 1916 demanded immediate action to determine, if possible, the source of infection. Survey of the industrial field, schools and certain homes. Results of the survey. Treatment of the newly discovered cases. Conclusions.

Leader in discussion: Dr. J. R. Newcomb, Indianapolis.

2. DR. L. D. BROSE, Evansville.

Subject: Ocular Tuberculosis.

Abstract.—Tuberculous disease of the eye occurs both as an intra- and extra-ocular affection. Histologically: a grayish or yellowish gray formation made up of epithelioid cells, central giant cells and lymphoid cells, the result of reaction of stroma cells to tubercle bacillus and its toxins. The skin of the lids may be affected primarily and secondarily. In the conjunctiva we meet three types: (a) acute miliary, (b) chronic ulcerative, (c) diffusely swollen conjunctiva. Infection may follow sputum, bearing tubercle bacilli or foreign bodies, contaminated by such germs introduced into the eye. Also by continuity by way of the pharynx, nose and lacrimal sac. Hematogenous infection to be thought of when both eyes diseased. Prognosis grave because of the danger of perforation of the ball. Corneal types: (a) pannus, (b) chronic ulcerative scleritis and episcleritis often due to tuberculosis. Tuberculous iritis and choroiditis, as a rule secondary, with three types: (a) small disseminated multiple formations, (b) diffuse general iris thickening, (c) conglomerate tubercle, which may be mistaken for neoplasm. Recurrent retinal hemorrhages in the young, often due to tuberculous retinitis. Diagnosis ocular tuberculosis rests on macro-

scopical appearance, histologic examination, experimental test and biologic reaction. The curative and immunizing effect of the biologic agent is often very limited and not comparable to that found with typhoid fever serum.

Leaders in discussion: Dr. W. F. Hughes, Indianapolis; Dr. J. E. P. Holland, Bloomington.

3. DR. E. E. HOLLAND, Richmond.

Subject: Focal Infection as an Etiologic Factor in Ophthalmic Inflammations.

Abstract.—The recent literature on the subject is reviewed and four case reports are given. One case of iritis associated with pyorrhea, two cases of retinitis from pyorrhea, and one case of optic neuritis from sphenoid sinusitis.

4. DR. S. A. SHOEMAKER, Bluffton.

Subject: Ocular Diseases Due to Foci of Infection Adjacent to or Remote from the Eye.

Abstract.—The need of diligent search for these foci when their presence and location are not patent. The need for their abatement as far as possible. The need and importance of impressing on the minds of physicians and laymen, the prevalence and mischief of these foci and the value of their speedy correction. The danger and fallacy of calling every ocular disease the result of a "cold," rheumatism, etc.; not so many of them due to tuberculosis and syphilis as we formerly supposed. Many are caused by streptococcic and pneumococcic infection. A case in point.

Leaders in discussion: Dr. D. H. Richards, Vincennes; Dr. W. J. Leach, New Albany.

SECRETARY-TREASURER'S REPORT

House of Delegates, Indiana State Medical Association:

GENTLEMEN: In accordance with the usual custom, I submit a condensed report for the year 1917 covering the period up to September 1 of this year. The councilors' reports for the fiscal year 1916 were printed in the JOURNAL earlier in the year, and have been made a matter of record.

It is very gratifying to announce that the membership this year will exceed all expectations. So far there have been 2,641 paid up members, a number which is in excess of any previous year's mark.

The treasurer's report summarized to date follows and includes all moneys received with the exception of the \$1 voluntary assessment, which has passed through the hands of the executive secretary. This will be accounted for in the complete report for the year, which will be published later.

TREASURER'S REPORT, SEPT. 1, 1917

Balance on hand Jan. 1, 1917.....	\$2,591.56	
2,641 members to date	5,282.00	
		\$7,873.56

EXPENDITURES 1917 TO DATE

JOURNAL subscriptions (2,641 members)	1,980.75	
Medical defense	1,980.75	
Executive Secretary's office	1,321.60	
Stationery	189.90	
Councilors	6.20	
Fort Wayne Session, balance due.	16.89	
		5,496.09

Balance on hand Sept. 1, 1917.....	\$2,377.47
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After paying the expenses of the Evansville Session, there will be very little over \$1,000 left in the treasury and a part of this will still have to go to the executive secretary. In spite of the fact that the treasury has been depleted, no one regrets the expense in connection with the Indianapolis office. It is, therefore, expected that the House of Delegates will raise the dues at this coming session and make this office a permanent affair.

CHARLES N. COMBS, Secretary-Treasurer.
Respectfully submitted,

REPORT OF COMMITTEE ON ARRANGEMENTS

House of Delegates, Indiana State Medical Association.

Gentlemen: Your Committee on Arrangements makes the following report:

Through the courtesy of the Elk's Club the annual smoker and get-together meeting will be held at the Elk's Home, September 26, at 9 p. m., following the meeting of the House of Delegates, which will be held in the Coliseum Building.

The sessions of the House of Delegates, the Section meetings and general meetings will be held in the new Coliseum Building. This building is the pride of the city, and was built for convention purposes and only recently opened.

On the night of September 27 the attending members of the Association, with their friends and guests, will go on the steamer *Fowler* and barge for a moonlight excursion. There will be dancing and other features of entertainment.

The committee regrets that it is unable to offer an old fashioned southern barbecue, feeling that under conditions of the great war it would not be fitting to prepare so elaborate a luncheon as this would require.

On September 27, at 1 p. m., the ladies will be taken in automobiles to the historic town of New Harmony. This trip will offer an opportunity to see this noted old place, with its various points of interest. Luncheon will be served in the old tavern, and the return trip will be made in time for the evening trains.

The various clubs have kindly extended the courtesies of their buildings, and the Chamber of Commerce offers its assistance in every way.

Respectfully submitted,
EDWIN WALKER, Chairman.

REPORT OF COMMITTEE ON SCIENTIFIC WORK

House of Delegates, Indiana State Medical Association.

Gentlemen: Your Committee on Scientific Work has no special report except program for this session which we trust will meet your approval.

Respectfully submitted,
DAVID ROSS, Chairman,
J. M. CUNNINGHAM,
E. M. SHANKLIN,
CHARLES N. COMBS, ex officio.

REPORT OF COMMITTEE ON MEDICAL DEFENSE

House of Delegates, Indiana State Medical Association.

Gentlemen: The condition of the affairs of this committee continue satisfactory, both in financial matters and in results obtained. During this year one case has been put in shape for decision by the Supreme

Court, where it is yet pending, involving the validity of the law concerning admission of persons to the State Hospital for the Insane, a matter of the most vital general interest to the profession. The dismissal of three cases in northern Indiana and the dismissal of one case in southern Indiana, as the result of the effort of our attorneys at Ft. Wayne, LaPorte and Evansville, should tend to discourage other litigents. Our greatest victory of the year was at Huntington, where a member otherwise uninsured, was successfully defended in a six-day fight before jury, against a plaintiff who had rallied to her support three eminent lawyers of northern Indiana. This trial was watched with interest in Huntington, Ft. Wayne, Warsaw and throughout the county of Wabash. It did not occur without some expense, as legal talent had to be offset, but the victory was worth more than the \$500 expended. Incidentally, it may be said, that in this case it was brought out in the evidence that the doctor was in our membership, and that our general counsel was on the ground looking after his interests, without any apparent harm to the defense, it being explained that we paid no damages. This is in contradiction of the oft-expressed opinion that it might react harmfully to the defense if it became known that the State Medical Association supported its members, morally and materially.

While we are not trying to make a record of per case expense, it yet seems to remain about the same as before, approximately \$100 per case, on the whole number of cases pending, and undoubtedly our existence as a fighting machine is acting more and more as a deterrent of this class of litigation.

We append a financial statement showing distribution of expense.

FINANCIAL STATEMENT

Balance in fund at last published report.....	\$4,971.14
Received from Dr. Coombs, Association treasurer	2,028.75
Interest on savings deposit.....	121.75
Total	\$7,121.64

EXPENDITURES

Dr. J. B. Long—misc. exp. (closed)...	\$ 4.05
Bond of Acting Chairman.....	15.00
Taxes for 1916.....	80.70
Dr. Thomas (pending Supreme Court)	129.00
Dr. Christie (closed)	31.40
Dr. Glock (closed—dismissed).....	25.00
Dr. McHugh (closed—dismissed)....	25.00
Dr. Johnson (closed—dismissed).....	25.00
Dr. H. H. Long (closed—dismissed)	150.00
Dr. Copeland (pending)	100.00
Dr. Shoemaker (closed—verdict).....	482.54
Investigation threatened case.....	26.00
Compensation of General Counsel to August 1	330.00
	\$1,423.69
Balance in fund Aug. 16, 1917.....	5,697.95
	\$7,121.64

We may add that the entire account of the Medical Defense Committee, both savings and for current expenses, is now deposited with the Union Trust Company, Indianapolis, and that arrangements have been made whereby the funds draw interest not only on the savings deposit, but also on the current account.

ALBERT E. STERNE, Chairman,
A. C. KIMBERLIN,
JOSEPH RILUS EASTMAN.

REPORT OF COMMITTEE ON
NECROLOGY

House of Delegates, Indiana State Medical Association.

Gentlemen: From Aug. 1, 1916, to July 31, 1917, one hundred and nineteen (119) physicians of Indiana have passed away by death. Their names and date of death have been properly recorded in THE JOURNAL of the Indiana State Medical Association.

G. W. H. KEMPER, Chairman.

REPORT OF COMMITTEE ON PUBLIC
POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association.

Gentlemen: The Committee on Public Policy and Legislation begs to submit the following report:

Your committee has been chiefly concerned during the past year with the session of the Indiana General Assembly just passed. On Dec. 1, 1916, a central office of the association was opened in Indianapolis and the executive secretary instructed to give his entire time from then until the close of the legislative session in caring for the physicians' interests in the legislature. The chairman of the committee on Public Policy and Legislation met with the executive secretary practically every morning from December 1 until the session came to a close in March. The whole committee held almost weekly meetings during the period.

It was decided that a personal campaign, getting into personal touch with the legislators, should be attempted, and to this end the county secretaries were asked to report the names of the physicians of each legislator. After thirty days' effort all but twenty-two county secretaries did so. Letters were in turn written to the physicians asking that they personally see their legislator and pledge him to stand by the physicians of Indiana. This brought good results. This personal campaign, bringing pressure through friendly sources was continued by letters, telegrams, long distance telephone and personal visits throughout the session.

We were met with several issues of serious concern to the Association and the profession. In all about thirty bills were introduced during the session affecting the profession. A number of these were of less importance and several were properly buried in the committee, after considerable work. Of the more important issues the following may be mentioned:

The chiropractors' attempt to obtain a special state board to license their members, and without any educational or professional standards, was kept up persistently during the entire session. The chiropractors had a paid attorney and a publicity man who gave almost their entire time to an attempt to get their measure passed. We were able to administer to them an overwhelming defeat, but it was only after the profession throughout the state was thoroughly aroused, which was not easy of accomplishment. Their own measure was so amended on second reading as to put them directly under the control of the State Board of Medical Registration and Examination the same as any other applicants for license, after which they themselves fought to kill it. The amendment prepared by the chairman of this committee and adopted by a large majority in the legislature, providing for uniform requirements for chiropractors and any others who apply for license, was so manifestly fair that it met very general approval. We shall have this same fight at the next session, probably, with renewed vigor.

The activity of the druggists also was very marked. One of their measures, aimed directly at the physicians, placed all physicians' offices under the supervision of the state drug commissioner, to be conducted and operated as he saw fit. Another provided that every holder must be labeled fully in accordance with its contents, this being attempted in an effort to have patients have druggists fill their prescriptions the second time without consulting their physicians. The Association is advised to take notice that the allied drug interests soon will attempt to obtain the passage of a law preventing physicians from filling their own prescriptions.

Many other minor important issues were met with each week, and it may be said that the interests of the physicians were not damaged at the session. Too much credit for the outcome can never be bestowed on Representative Dr. Read, chairman of the House Committee on Public Health, who worked tirelessly for the high medical standards, and to Senator Greene of Albion, until his death chairman of the Senate Committee on Medicine. Representative Miller of Howard County, for his strong attacks on chiropractors, and Representative Dynes of Marion also are entitled to the full credit and thanks of the Association.

Following the close of the session, plans were well under way for caring for the interests of the Association at the Constitutional Convention, when it was called off.

The mechanics' lien law was given very careful consideration by your committee, in answer to the request of various county societies and individual members of the profession throughout the state. Your committee received requests to try to secure an amendment to this law providing that patients may select their own physicians instead of the employer. Other societies petitioned your committee to oppose the passage of such amendment, as instances were cited where patients had requested the employment of wholly incompetent men to care for serious surgical cases, and urged that it was discreditable to the profession and unfair to the employer who has to pay the bills to have selections made in this way. Your committee was unable to harmonize these divergent views and suggests that the matter receive the careful consideration of the various county societies, and that some plan be evolved by which the interests of employers and employees can both be safeguarded as well as the interests and reputation of the profession.

Respectfully submitted,

F. E. SCHORTEMEIER, Exec. Sec.

The foregoing report prepared by Mr. Schortemeier, executive secretary, is approved and commended to the careful consideration of the member of the medical profession. It is especially recommended that efforts be actively continued on the part of the different societies in all matters affecting medical legislation. Emphasis is especially placed on the fact that no efforts to combat laws which lower the present high standard of medical education and the issuance of licenses can be successfully carried out unless the profession continually and energetically cooperates with the legislative committee. Constant effort should be made to oppose any laws which permit one class of practitioners to obtain license under lower or different standards from any other.

Respectfully submitted,

W. N. WISHARD, Chairman.

REPORT OF COMMITTEE ON ADMINISTRATION

House of Delegates, Indiana State Medical Association.

Gentlemen: The only warrant for the continued existence of any committee of this Association lies in the good that it may accomplish for the welfare and interests of the members. Your Committee on Administration herewith submits its report for the first year of its existence and leaves entirely to your judgment whether that existence shall be further justified.

Section 1. The primary purpose of this committee was the selection of an executive secretary. This was accomplished in the appointment of Frederick E. Schortemeier. We have reason to believe that this selection and appointment was an eminently satisfactory one.

Section 2. During the session of the legislature the year 1917, despite the fact that little or no preparation for the work to be done was possible on account of the short time intervening between the organization of the committee, the appointment of Mr. Schortemeier as executive secretary and the session of the legislature, the following bills were successfully fought. Every bill directed strictly against the welfare of the medical profession of the State of Indiana, notably the chiropractic license attempt, was bitterly contested and won.

H. No. 154.—(Alldredge) Chiropractors' license bill. Engrossed in House and then dropped. (Opposed.)

H. No. 112.—(Read) Bill to codify medical laws. Never taken out of committee. (Opposed in many particulars.)

H. No. 431.—(Harker) Health insurance bill; contracts, cancellation. Postponed indefinitely.

H. No. 588.—(Walker) State divided into health districts. Indefinitely postponed.

H. No. 591.—(McGonagle) Health board relief bill, providing expenses of members. Passed both Houses. No action so far by Governor.

H. No. 629.—(Gentry) Bill providing funds for I. U. Medical School Building. Passed by both Houses, but Governor refuses to receive it. (Supported.)

(Failure of Excise Bill to pass thus creating financial stringency, reason assigned by Governor for action.)

H. No. 115.—(McNagney) Bill providing medical inspection in schools. Passed House, killed in Senate. (Supported.)

H. No. 55.—(Williams) Duties of County Health Officer transferred to State Coroner. Indefinitely postponed.

H. No. 150.—(Dilworth) Bill affecting Company physicians, medical fees and waiting periods. Indefinitely postponed.

H. No. 626.—(Dynes) Regulating venereal diseases. Engrossed and postponed indefinitely.

H. No. 269.—Amends previous law relating to care of tuberculosis in county hospitals by defining authority of county commissioners in treatment of same. Vote: House, 70 to 14; Senate, 41 to 0. Became law without Governor's signature.

H. No. 270.—Bill for an act for the prevention and control of tuberculosis. Vote: House, 83 to 3; Senate, 27 to 8. Became law without Governor's signature.

S. No. 154.—(Beardsley) Drug label bill extending terms of pure food act to physicians. Killed in Senate. (Opposed.)

S. No. 137.—(Hemphill) Prohibit sale of habit-forming drugs. Engrossed, then died.

S. No. 126.—(McKinley) Health certificate required with application for marriage license. Died in committee.

S. No. 158.—(Beardsley) Provides training schools for tuberculosis nurses. Passed in Senate, died in the House.

Joint resolution by Dr. Wishard authorizing I. U. President and Trustees to inquire into any useful means to treat disease, for which unusual merit is claimed and to report to Governor not later than Jan. 1, 1919. Passed by House and probably will be acted on by University regardless of Senate's failure to take action.

Section 3. Expenses to Aug. 1, 1917.

RECEIPTS

Received from Dr. Combs.....	\$1,000.00
Bills paid by Dr. Combs.....	709.22
Voluntary assessment from county societies	805.00
Contribution to legislative fight from pharmaceutical houses	200.00
Total	\$2,714.22

DISBURSEMENTS

Compensation executive secretary...	\$ 525.00
Stenographic help	419.00
Office rent	400.00
Office furniture	367.70
Office supplies	185.70
Office stationery	126.75
Stamps	146.00
Telephone and telegrams.....	101.28
Light service	10.12
Clipping service	6.03
Cash expenditures by executive secretary	34.70
	<u>\$2,322.28</u>
Balance on hand August 1.....	\$ 391.94

Section 4. The experience of the past year justifies the conclusion that it would be wise for this body, the House of Delegates of the Indiana State Medical Association, to effect a simplified method of doing the business of the organization and to more thoroughly coordinate the legal or legislative work to be done, in order to save both time and efforts of the members of the various committees, who so generously and whole-heartedly give personal services, without remuneration, to protect the interest of the medical profession.

We, therefore, recommend a Committee on Legislation of a permanent type closely affiliated with the Committee on Administration, so that there may be less opportunity for misunderstanding in matters legislative. During the last session of the legislature the amount of time and effort devoted to the objects of this Association by the members of the committees and subcommittees was far greater than there was any necessity for, and the work was very much more

arduous and time-taking than anyone not directly associated with the work could conceive. All needless expenditure of energy and time should be eliminated.

As regards the business affairs of the Association, it is our opinion that every matter, appertaining strictly to such business affairs, pass through the central office of the Association at Indianapolis. This would include not only the details of expenditure and income of the office, as in the past year, but all business matters of the State Journal (not the scientific editorship) and the business matters of the present secretary-treasurer. This will avoid unnecessary duplication of expense, the waste of material, such as stationery, stamps, etc., and do away with the present extremely cumbersome and unbusinesslike manner of transacting our affairs.

We, therefore, recommend the abolition of the office of secretary-treasurer, with the attendant salary of that office; the placing of the business management of the State Journal in the executive office of the Association; the joining of the purely business, but not the legal, side of the Committee on Medical Defense with those of the Committee on Administration; the placing of all contracts for stationery, work to be done, printing, etc., in the hands of the executive secretary.

We further recommend that this officer be placed under bond to the amount of \$——, and any other officer designated to handle the funds of the Association be likewise placed under bond in adequate sum.

We suggest, further, that this body take official cognizance of the present serious war situation, and that plans be devised to assist, as far as possible, the federal and state authorities in perfecting all branches of the medical military service at home and abroad. Your chairman is, at the present time, in conference with the surgeon-general's office and with the governor of the state, and hopes to lay before you whatever plans they may have in mind bearing on this subject.

ALBERT E. STERNE, Chairman.

Some of our doctors of German descent are contributing neither sympathy nor support of any kind to the country in this time of war, and blandly inform their friends that they are neutral. No man can be neutral when the country that gives him a home, freedom and prosperity, is at war. Every citizen—in fact every resident of the United States—is either a friend and active supporter of the United States in the present war or he is an enemy and should be dealt with as such. There are only two sides to this question, and no neutral ground. If any of our doctor friends are sympathizing with Germany at the present time, then it is time for those doctors to be dealt with as enemies of the United States. The time is past for expressing any sympathy or showing any leniency to the man who does not now uphold the United States in its war with a nation that through its acts has lost the respect of all the civilized nations of the world.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

SEPTEMBER 15, 1917

EDITORIALS

OUR PRESIDENT

John Holliday Oliver, President of the Indiana State Medical Association, was born in Indianapolis in 1859. He attended the Indianapolis public schools, and later Butler and Wabash colleges, from which he received the B.A. and M.A. degrees. He received his medical degree from the Medical College of Indiana in 1881, and the following year served as intern in the Indianapolis City Hospital, which institution he also served as superintendent from 1887 to 1890.

Early in his medical career, Dr. Oliver began to make a specialty of surgery, and his qualifications were such that his services were sought as a teacher. From 1882 to 1895, inclusive, he was Professor of Anatomy and Oral Surgery in the Indiana Dental College, and from 1890 to 1898, inclusive, he was Professor of Anatomy and Minor Surgery in the Indiana Medical College. With the organization of the Medical Department of Indiana University in 1898 Dr. Oliver was given the position of Professor of Surgery, a position that he has held from that time to the present.

Dr. Oliver is a member of the American Medical Association, the Indiana State Medical Association, the Indianapolis Medical Society, and is a charter member of the American College of Surgeons.

The Indiana State Medical Association has done itself honor in making Dr. Oliver its President, for it has recognized a man of ability and training as also a man of sterling character.

INFANTILE PARALYSIS

Every health officer who has attempted to control an epidemic of infantile paralysis has been at his wits' end to know how to proceed, for the disease usually seems to be sporadic in

character; that is to say, there is no connection between cases in any given community, the symptoms are indefinite before the paralysis develops and the laboratory examinations of the cerebrospinal fluid in the early part of the disease are indefinite.

One of the most interesting and efficient procedures ever used in an infantile paralysis epidemic is reported by M. Nicol.¹

Saugerties, a town and village from a consolidated health district, with an all year population of 9,000 to 10,000 on the western banks of the Hudson River, about 100 miles above New York City, had an epidemic of polio in 1916. The local epidemic seemed clearly an imported one, starting with a case coming from Brooklyn and reported to the health officer July 21. Within eight days 5 cases were reported in Saugerties and then for a period of two months there developed an average of two cases a week. During the latter part of September there was a flareup, eleven new cases developing between September 23 and the 30th, and fifteen cases more during the first two weeks in October.

A rigid quarantine was instituted as each case was reported, but this was not effectual. An investigation disclosed the fact that few of the cases were reported until actual paralysis had set in. All patients in the prodromal stages and during the period of acute symptoms before the onset of demonstrable paralysis, were in full contact with other members of the household and such other persons as cared to go in and out of the sickroom.

On October 15 a meeting of all local physicians was called and every physician agreed to isolate every case of fever under his care until a positive diagnosis could be made. This measure, along with the employment of a public health nurse for three weeks who made daily inspections of all schoolchildren, followed up absentees, traced contacts and enforced strict quarantine, appears to have controlled the epidemic.

Within five days previous to the doctors' meeting October 15, seven new cases had developed; after that date only three new cases developed. Two were direct contacts already under supervision and the third an isolated case. In these cases the duration of acute symptoms was three to seven days. Incubation period ten days or less.

1. American Jour. Dis. of Child., August, 1917, No. 2, xiv.

THE PHYSICIAN IN THE MILITARY SERVICE

It is very gratifying to note that the medical profession is responding to our country's call in a splendid and noble manner. The first call for approximately 20,000 physicians who should be available for military duty at once or as soon as needed has been almost—if not entirely—answered in full. From all over the country physicians have enrolled in the Medical Reserve Corps, and have entered into the service with the idea of doing everything demanded of them.

The sacrifice that most of the physicians have made in leaving their homes and their work for military service can hardly be properly appreciated by any others than those who really know. Although it cannot be denied that there are many of the younger physicians serving who are really better off in the Army than in private practice, yet it is true that most of the men who have entered the training camps for medical officers up to the present have left good substantial practices yielding quite comfortable incomes. Some few men have left practices yielding very large incomes. These men obviously could not make ends meet on their incomes as medical officers. They all must have other sources of income. However, the former class of physicians—the great majority by far—depend entirely, or nearly so, on their salaries as officers. To make that do necessitates economizing. But the families of most physicians already know from experience what that means, and, although it may entail more or less hardship, economy becomes the watchword among them more than ever before.

The greatest sacrifice the physician makes is in leaving his private practice for a period which is so indefinite as the duration of the present war. It takes quite a few years for the average physician to establish a practice lucrative enough to enable him to maintain his family and himself in the modest but comfortable manner that the physician is expected to maintain. But it does not take very long for a practice to become completely disrupted. Should this war last any length of time—as it most assuredly will—practically every physician in the military service will have lost all—or nearly all—of his former clientele. When the war finally is over and he returns home he will have to begin practically anew. No doubt it

will not be so hard to regain one's practice as it was to gain it in the first place, yet it will be hard enough. That period of rebuilding of practices will be a hard one.

More to be pitied than censured will be the physician who may have brought in an outsider to retain his practice during his absence, for he is very apt, indeed, to find on his return that the former outsider—now a real insider—will retain quite firmly the hold he has secured in that community. Under such circumstances the period of rebuilding will inevitably be much harder, and even after some of the practice will have been regained the increased competition inevitably will be felt in more ways than one.

All this the physicians know—yet they ask for no praise and no reward. Their only wish is to be given the opportunity of demonstrating how well and how faithfully they will do their duty in time of need. They realize how important their group is in the military establishment, so they are ready to fill the need for their services in any capacity required of them. This admirable spirit already has been conveyed to the medical authorities of the Army in such an unmistakable way that they have become assured that the future of the Medical Department of the Army is safe in the hands of the physicians enrolled in the Medical Reserve Corps.

Sacrifice is nothing new to the physician. It is a frequent occurrence in his line of work. No matter how great the sacrifice may be, the physician will think nothing of it, but will go and do his duty, and when his country calls him it will not call in vain.

LOWERING THE STANDARDS FOR THE PRACTICE OF MEDICINE AND SURGERY

The efforts of the osteopaths to secure the legal right to practice major surgery is in line with the determination of several poorly educated and illy trained sects to practice regular medicine in any manner whatsoever. We have long maintained that the drugless healers, and in fact the whole horde of medical pretenders eventually, if they have their way, will administer drugs and attempt to perform any and all kinds of surgical operations without the formality of the adequate education and training now prescribed for the regular medical profession. Even the so-called optometrists now

are diagnosing and prescribing for eye diseases in some localities without let or hindrance, and it is only a question of time until they, too, will go before our legislatures and ask for legal recognition of their practices. How inconsistent it is for all these aspirants for medical recognition to start out with a claim that they do not practice medicine, and in some instances even condemn drug giving and surgical operations, yet finally making demand that they be permitted to do the very thing they are not qualified to do and which they have condemned. What these incompetents and pretenders desire is admission to medical practice without conforming to any standard of requirements or preparedness that can be considered worthy of the name. And the strange thing is that the public is so bamboozled by the specious plea put forth. Does education, experience and training count for nothing in this world? The science and art of medicine, as developed by an army of highly educated and trained men who have devoted their lives to the work, and who represent some of the brightest minds that the world has ever seen, certainly means nothing if it can be set aside or absorbed by the ignorant sects that now clamor for and are receiving recognition. There is an old saying that "you can't get blood out of a turnip," but there is no telling how long that saying will hold good, for, figuratively speaking, we are now getting doctors out of cabbage heads.

MEDICAL STUDENTS AND HOSPITAL INTERNS IN MILITARY SERVICE

The Provost Marshal General has sent the following to governors of all states:

The President prescribes the following Supplemental Regulations governing the execution of the selective service law:

First. Hospital interns who are graduates of well recognized medical schools or medical students in their fourth, third, or second year in any well recognized medical school who have not been called by a local board may enlist in the Enlisted Reserve Corps provided for by section 55 of the national defense act under regulations to be issued by the Surgeon General, and if they are thereafter called by a local board they may be discharged on proper claim presented on the ground that they are in the military service of the United States.

Second. A hospital intern who is a graduate of a well recognized medical school or a medical student in his fourth, third, or second year in any well recognized medical school, who has been called by a local board and physically examined and accepted, and by or in behalf of whom no claim for exemption or discharge is pending, and who has not been ordered to military duty, may apply to the Surgeon General of the Army to be ordered to report at once to a local board for military duty and thus be inducted into the military service of the United States, immediately thereupon to be discharged from the National Army for the purpose of enlisting in the Enlisted Reserve Corps of the Medical Department. With every such request must be enclosed a copy of the order of the local board calling him to report for physical examination (Form 103), affidavit evidence of the status of the applicant as a medical student or intern and an engagement to enlist in the Enlisted Reserve Corps of the Medical Department.

Upon receipt of such application with the named inclosures the Surgeon General will forward the case to the Adjutant General with his recommendations. Thereupon the Adjutant General may issue an order to such intern or medical student to report to his local board for military duty on a specified date, in person or by mail or telegraph, as seems most desirable. This order may issue regardless of the person's order of liability for military service. From and after the date so specified such person shall be in the military service of the United States. He shall not be sent by the local board to a mobilization camp, but shall remain awaiting the orders of the Adjutant General of the Army. The Adjutant General may forthwith issue an order discharging such person from the military service for the convenience of the government.

Three official copies of the discharge order should be sent at once by the Adjutant General to the local board. Upon receipt of these orders the local board should enter the name of the man discharged on Form 164A and forward form 164A, together with two of the certified copies of the order of discharge, to the mobilization camp to which it furnishes men. The authorities at the mobilization camp will make the necessary entries to complete Form 164A, and will thereupon give the local board credit on its net quota for one drafted man.

EDITORIAL NOTES**DEAR DOCTOR:**

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE TIME—September 26, 27 and 28.

THE PLACE—Evansville.

THE ATTRACTION—The annual session of the Indiana State Medical Association.

MANY members of the Indiana State Medical Association are now serving in the Medical Officers Reserve Corps and will be unable to attend the Evansville session. Despite this, the attendance at Evansville promises to be fairly creditable.

BECAUSE of the fact that extraordinary health measures are made more vitally important by the entrance of the United States into war, civic, medical and hygiene organizations have renewed the agitation for the establishment of a National Health Bureau, with local, state and municipal bodies.

OWING to conditions brought about by the war, it has been difficult to secure distinguished guests for the sections to be present at the Evansville session. However, the Eye, Ear, Nose and Throat Section has been fortunate in securing as its guest Dr. Norval H. Pierce of Chicago, who will present a paper before that section on the subject, "The Static Labyrinth in Health and Disease."

WE are informed that there will be no commercial exhibits at the Evansville session, as war conditions make it inadvisable for firms to go to the trouble and expense incident to such exhibitions. When conducted along legitimate lines, the commercial exhibit feature is an instructive one, and appreciated by nearly all visitors to the annual sessions of the Association. It is regretted that this feature will be impossible this year.

THE chiropractors of Oklahoma recently received a blow when their bill, giving them legal status in that state without having to comply with the requirements of the medical practice act, was defeated, and another bill was substituted for it, and passed, placing their licensure in the hands of the State Board of Medical Examiners.

ANNOUNCEMENT is made by Dr. John W. Sluss of Indianapolis, president of the Examining Board for the Medical Reserve Corps, that there has been a decided increase in the number of applications for army service. Through some misunderstanding many applications have been sent to Dr. E. D. Clark, at Indianapolis, whereas all applications should be sent to Major John W. Sluss, president of the Examining Board for the Medical Reserve Corps, 227 Newton Claypool Building, Indianapolis.

CALIFORNIA, one of the first states to abolish the public drinking cup, has outlawed the common soda water glass in a statute passed by the last legislature and which has just become effective. The law provides that all glasses must be cleansed in boiling water and thoroughly sterilized, following their use by previous persons, and before being used again. A severe penalty is embodied in the law for the disobedience of same. How long before the other states will fall in line with California in this measure? In this connection we might mention that the illy ventilated, germ disseminating moving picture theater soon should come in for a housecleaning.

WHAT a pity it is that this country must suffer from the petty and mischief-making conduct of traitors, demagogues, and incompetents at Washington! Here we are in war, with imperative demand for speed in preparing to assist in overcoming a relentless foe, and yet inexcusable delays, due to the opposition of senators and congressmen, prevents the prompt adoption of measures for food control, ship building, aircraft construction, and putting in force other war measures so vitally needed at this particular time. Some opposition smacks very loudly of treason, though most of it is due to the rankest kind of partisan politics and lack of that breadth of mental view so necessary in the real statesman. It is a wonder that the great mass of the American people continue to be patriotic and loyal to the flag in the face of such unbecoming conduct on the part of some of our leaders.

IN your enthusiasm over the boys who have won officers' commissions at Fort Benjamin Harrison don't overlook the fact that hundreds of mighty brave men are there training in the medical cantonment. Many of these men are giving up large incomes and all of them are making enormous personal sacrifice to enter the service of their country. Their efforts here are not spectacular, but what these men are training to accomplish for the members of the American Army and for our allies later on shines as one of the brightest pages in the general scheme of this country for carrying on its part in the world war. Here's to these brave "medicos" and to the members of the ambulance and field hospital corps!—Indianapolis *Star*.

IN view of the proposed amendment to the constitution which will make the ex-presidents of the Association members of the House of Delegates, the Secretary of the Association has furnished us a list of the living ex-presidents, which is as follows: G. W. H. Kemper, Muncie; Edwin Walker, Evansville; G. F. Beasley, Lafayette; C. S. Bond, Richmond; Miles F. Porter, Fort Wayne; W. N. Wishard, Indianapolis; J. C. Sexton, Rushville; George W. McCaskey, Fort Wayne; A. W. Brayton, Indianapolis; J. B. Berteling, South Bend; Jonas Stewart, Anderson; George T. McCoy, Columbus; D. C. Peyton, Jeffersonville; T. C. Kennedy, Indianapolis; F. C. Heath, Indianapolis; W. F. Howat, Hammond; A. C. Kimberlin, Indianapolis; J. P. Salb, Jasper; F. B. Wynn, Indianapolis; G. F. Keiper, Lafayette; J. H. Oliver, Indianapolis.

Nor a few people in this country, and some of them occupying high positions in the control of government affairs, are doing some talking that is nothing less than traitorous in character. In fact, we believe that freedom of speech is not only being abused, but the real feelings of some people who are antagonistic to the best interests of this country are being expressed too freely for the good of all concerned. There is one way and one way only to deal with traitors—they should be backed up against a wall and shot. The funerals of a few traitors will go a long way toward stirring up a little more active support of the flag and what it represents. And while we are on this subject, we are reminded that while they are rare, yet there are a few doctors who are traitors in every sense of the word, and they, too, deserve the "cold lead treatment."

It does not speak well for local examiners to have applicants for army and navy service, who have been passed on as being sound in every particular, thrown out by army surgeons who find diseases of the heart or lungs, flatfoot, discharging ears, markedly impaired eyesight, and other defects which disqualify a man for war service. In some instances a favorable medical report from home physicians is based on favoritism, but more often it is due to either carelessness or actual incompetence on the part of the examiner. In either instance it is inexcusable. Probably there will be less of that kind of examining from this time on, as radical changes are being made in the method of examining recruits, and the knowledge that gross errors on the part of examiners will be detected will have the effect of stimulating a higher grade of service and discouraging incompetents from being so free in passing opinion.

FROM the fact that many physicians desiring to enter military medical service have had difficulty in securing cancelation of unexpired leases for office rooms, etc., and believing that every effort should be put forth to assist those doctors who desire to give their service to the country, the Chicago Rotary Club has formed what is known as the Physicians' Lease Committee. This committee is sending out thousands of letters requesting information concerning cases of this kind, and they desire the cooperation of every physician in Indiana in securing this information. Their plan is to create a strong public opinion favoring the canceling of leases in such cases, and, if advisable, they expect to carry the matter before Congress for consideration. To carry out this plan the committee must have figures and facts, and what they ask is that each physician advise them of any case of this kind about which they have definite knowledge, sending the information to Mr. R. R. Denny, Chairman (President of the Denny Food Sales Co.), 359 East Ohio Street, Chicago, Ill.

A WAR meeting will be held in Washington, D. C., Oct. 17-20, 1917, by the American Public Health Association. This will replace the annual meeting which was to be held at New Orleans, La., Dec. 4-7, 1917. The papers and conferences will deal largely with the health problems created by the war—the food supply, communicable diseases among soldiers, war and venereal diseases, war and the health of the civil population, etc. This meeting is a vitally important one. Doctors who are "doing their

bit" at home should attend this meeting that they may be better fitted to cope with these problem of public health during the war crisis. Preliminary programs will be mailed to all members of the American Public Health Association, and nonmembers may receive them free upon request to the American Public Health Association, 126 Massachusetts Avenue, Boston, Mass. It is urged that those who contemplate attending this meeting make reservations for hotel accommodations early. It will be easy to cancel reservations at the last minute, but it may not be possible to secure accommodations at the last minute.

WE dislike to acknowledge it, but are forced to admit that there are slackers in the medical profession. However, this lack of loyalty to the country is less marked in the medical profession than among men in other walks of life, though it is altogether too prominent to be excused. Many physicians have volunteered their services, but the trouble of it is, the men who should volunteer are the ones who do not. Many men at great personal sacrifice have volunteered, while others who really would make little sacrifice have failed to offer their services. At all events, the country is not securing a sufficient number of medical men for war service, and conscription is bound to come—and it should come as the fairest way to meet the demands occasioned by the circumstances. Conscription should take all medical men between 21 and 50 or even 55 years of age, and there should be just as definite rules concerning exemptions as there are for those who are selected for regular service. Many men will be found physically unfit, others will be judged more valuable at home, and under any circumstances a certain proportion of the medical profession must remain at home to take care of the civil population. But conscription is the only fair as well as efficient way of securing the requisite number of medical men for service.

THE Standard Publishing Company of Cincinnati is the publisher of several religious papers, among which may be mentioned the *Christian Standard*, *The Lookout*, and the Standard Sunday School Series. While many of the better class of newspapers, magazines and other periodicals are refusing to accept medical and proprietary medicine advertising of every description, the Standard Publishing Company, publisher of a number of religious papers which above all others should be clean and above criticism, continues to carry objectionable advertising, even in the face of complaints on the

part of their subscribers. One of our Indiana physicians complained because *The Lookout* carried the advertising of Nuxated Iron, a preparation that is just as much a patent medicine as Peruna, Lydia Pinkham's Vegetable Compound, or Pierce's Favorite Prescription. *The Journal of the American Medical Association*, in its issue of Oct. 21, 1916, states that Nuxated Iron is essentially secret in composition and that it is sold under claims that are directly and inferentially false and misleading not only as to its composition, but as to its alleged therapeutic effect. Nuxated Iron is branded as a nostrum which owes its continued existence and sale to advertising carried by lay publications and a few medical journals of ill repute, but the point of our criticism is that religious periodicals above all others should avoid even the suspicion of wrong doing, and when their attention is called to a practice that is openly condemned by their readers, and for practices that are considered too disreputable to be followed by the better class of lay publications, it seems to us that the publishers of religious journals would at least "sit up and take notice." Certainly these publishers cannot plead ignorance, and the only other alternative is to charge them with venality.

IN the July number of *Health News* a number of important suggestions concerning prohibition and the returned soldier—coming direct from Ernest H. Scammell, F.C.I.S., secretary of the Military Hospitals Commission of Canada, at a recent visit to the New York State Department of Health—are discussed. The fact is brought out that inasmuch as the United States wishes to avoid the mistakes of the other warring nations, it is well to consider that during the early years of the war the problem of inebriates among returned soldiers—due to the general popular desire to "treat" the returned soldier—became so great that plans for the building of an inebriates' home were contemplated; but following the establishment of prohibition, and the law against "treating" in the provinces not dry, the problem was a problem no longer, and in the province of Ontario the jail population became so greatly reduced that it was possible to convert one reformatory into a convalescent hospital. In further consideration of the question of prohibition, and the rôle of alcohol, we quote the following from the *Monthly Bulletin* of the Department of Health of the City of New York:

In an extremely readable article in a recent number of the *Journal of the American Medical Association*, Dr. Bernard Fantus, Professor of Pharmacology and

Therapeutics in the University of Illinois, discusses the rôle of alcohol in the welfare of the human race. The writer frankly admits that alcohol has food value. "Over 90 per cent. of it oxidizes in the tissues, each gram yielding over seven calories." This statement, however, is coupled with the warning that "when food is taken in abundance, alcohol is not only superfluous as a nutriment, but positively harmful."

After discussing the therapeutic uses of alcohol in fever and as an external application, Dr. Fantus presents the following conclusions: "It may be stated that alcohol has certain definite uses in the treatment of disease, though it is by no means indispensable. In the hands of the people, it is a dangerous habit-producing narcotic. The medical profession, well knowing its evil effects, cannot but ally itself with its enemies. Should humanity be deprived of liquor, it will have lost a comforter, but will have far less need for consolation. Alcohol may afford man a sense of well being, but it certainly does not contribute to the welfare of the human race."

With the best medical opinion rapidly crystallizing against the internal human use of alcohol, has not the time come to so rearrange our national finances as no longer to make it necessary to derive a vast income from the traffic in "a dangerous habit-forming narcotic"?

DEATHS

ISAAC A. ROSEBERRY, M.D., Independence, died August 3, of apoplexy, aged 83 years.

BELLE EVANS BOOTH, wife of Dr. A. D. Booth, Evansville, died July 28, aged 63 years.

SARAH EASTES, wife of Dr. William T. Eastes, Gaston, died September 1, aged 71 years.

SARAH FARRIS, widow of the late Dr. William W. Farris, Jeffersonville, died August 13, aged 88 years.

THORNTON DAGGY, M.D., Indianapolis, died July 29, aged 37 years. Graduated from the Eclectic Medical College of Indiana in 1908.

ANDREW B. MERCER, M.D., aged 63 years, died August 3 at his country home near Alexandria. Graduated in medicine from the University of Michigan in 1884.

PHILANDER W. PAYNE, M.D., for fifty years a practitioner of Franklin, died July 30 at the home of his daughter, aged 85 years. Received his medical degree from Jefferson Medical College in 1858.

JOHN E. MORRIS, M.D., died August 25 at his home in Indianapolis, aged 48 years. He graduated from the Indiana Medical College in 1896, and held the position of associate professor of surgery in the Indiana University School of Medicine up to the time of his death.

ABNER TOOTHAKER WELLS, M.D., of Kendallville, died August 17 at Little Rock, Ark., where he had gone in the interest of his health. Dr. Wells was 42 years of age. He graduated from the Baltimore University School of Medicine in 1899, and was a member of the Massachusetts State Medical Association.

OLIVER M. DAVIS, M.D., Marion, died August 28, of a complication of diseases. Dr. Davis was born in 1869, graduated from the Central Normal College, and the Indiana Medical College in 1894. He formerly was on the staff of the Marion Soldiers' Home, and has practiced medicine in the city of Marion for the past seventeen years. He was a member of the Grant County Medical Society and the Indiana State Medical Association.

V. A. MAGENHEIMER, M.D., partner to Dr. W. L. Thompson of Mooresville, died August 29 as the result of injuries received when his automobile was struck by an interurban car. Dr. Magenheimer was in training at Fort Benjamin Harrison, and was returning to the camp after having spent the day with his family at Mooresville. He was born in 1875, graduated from the Central College of Physicians and Surgeons in 1898, and was a member of the Morgan County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

INDIANAPOLIS

DR. ALBERT E. STERNE spent a few days at French Lick the latter part of the month.

DR. W. N. WISHARD spent the greater part of August enjoying a vacation at Fosston, Minn.

At the time of going to press Dr. Charles P. Emerson, dean of the Indiana University School of Medicine, was well on the road to recovery from an operation for gallstones. He has been able to attend to a few business matters from his bed at the Long Hospital.

ARRANGEMENTS whereby the Princeton Sanatorium at Princeton, Ind., is to become a branch of the Methodist Hospital at Indianapolis,

practically have been completed, according to Dr. C. E. Woods, superintendent of the hospital. The Princeton institution will be taken over and officially dedicated at the annual session of the Indiana Methodist Conference which meets at Princeton on September 19.

* FOURTEEN seniors of the Indiana University School of Medicine have been included in the draft list. It is too early to forecast accurately, the effect of the war on the freshman class at Bloomington, but it is probable that the number will be reduced materially. About ninety had signified their intention of taking up pre-medical work, but a considerable number of them already have entered various branches of military service.

ELEVEN homeopaths volunteered for service in the Medical Reserve Corps at a special meeting of the Indiana Institute of Homeopathy, held in Indianapolis last month. The volunteers were Dr. J. D. Talmage of Ladoga, Dr. E. E. Freeman of Greentown, Dr. G. W. Hoover of Greensburg, Dr. Charles B. Kern of Lafayette, Dr. J. W. Webb, Dr. A. A. Ogle, Dr. A. G. Doty, Dr. William E. George, Dr. H. J. Adams, Dr. H. C. Thomas, and Dr. Sollis Runnels, all of Indianapolis.

DR. WILLIAM F. DOEPPERS, recently commissioned a lieutenant in the Medical Corps U. S. Army, has landed in France, according to announcement received by his parents, Mr. and Mrs. J. W. Doeppers, of Indianapolis. Dr. Doeppers is a graduate of Indiana University and was an intern at St. Vincent's Hospital before going to the medical training camp at Fort Benjamin Harrison a few months ago. Lieut. Doeppers was the only Indiana physician among the twenty-five medical officers departing recently from Fort Harrison for France.

MEDICAL inspection of the Indianapolis Public Schools was reorganized at a recent meeting of the City Board of Health. Instead of conducting the medical inspection work with the assistance of thirty-two school inspectors and one chief inspector, who devote only part of their time to the work, the board decided to employ only eight inspectors who would devote one-half a day each week to the work. The following medical inspectors have been appointed for the next year: Drs. G. W. Seaton, W. H. Long, A. W. Miller, G. W. Hobbs, Martha Smith, Carrie Reid, J. L. Connelly, and William Gibbs.

MAJOR EDMUND DUGAN CLARK, director of Base Hospital Unit No. 32, has announced the complete personnel of his command. It consists of Majors Orange Garrett Pfaff and Bernays Kennedy; Captains Carleton Buel McCulloch, Alois Bachman Graham, Charles Dolph Humes, Eugene Bishop Mumford, Lafayette Page, Harry F. Byrnes, and Joseph Kent Worthington; Lieutenants Scott Robert Edwards, Ralph Landis Lochary, Raymond Cole Beeler, Robert Martin Moore, Elmer Funkhouser, Leslie H. Maxwell, Paul Thomas Hurt, Smith Quimby, Ralph Lincoln Sweet, John Thomas Day, Joseph Warren Ricketts, Frank Columbia Walker, Jack Walter Scherer, James Vincent Sparks. The last two officers are dentists. The hospital staff is composed of local men with the exception of Capt. H. F. Byrnes, an eye specialist. He comes from Springfield, Mass., has been highly recommended by the war department and has been stationed for a time at Fort Harrison. The hospital unit also numbers 180 enlisted men, 65 nurses, and 10 civilian employees, all women, who will serve as cooks, maids and stenographers.

The doctors and enlisted men mobilized September 1 at Fort Benjamin Harrison. The men already have received two doses of paratyphoid and smallpox vaccine. Indications point to the early departure of the hospital unit for France. The nurses and civilian employees are provided by the War Department and will be mobilized at the point of embarkation.

GENERAL

THE South Dakota chiropractic bill was defeated by one vote in the last legislature.

DR. C. W. SHAW of Flat Rock is removing to Oakley, Ohio, for the practice of medicine.

WORK on the new \$75,000 wing of the Mercy Hospital, Gary, was commenced in August.

DR. DANIEL R. BENNINGHOFF, Fort Wayne, has reported for duty at Camp Custer, Battle Creek, Mich.

DR. ARTHUR BOWLES of Manson, Iowa is taking over the practice of Dr. George W. Newell of Peru.

DR. J. S. BYERS, Decatur, has returned from Chicago, where he spent several weeks in post-graduate work.

DR. ROBERT M. PARKS, formerly an Indiana physician, died August 21 at his home in Louisville, Ky.

DR. JOHN B. ANDERSON of Vincennes was married on August 3 to Miss Katherine Sullivan of Washington.

DR. JAMES A. CRAIG of Gary, who has been quite seriously ill for several months, is able to resume his practice.

THE new Huntington County Hospital was dedicated and held open house to the public on Labor Day, September 3.

DR. AND MRS. G. S. ROW and daughter of Indianapolis are spending part of the summer at Forest Beach, Michigan.

SACRED HEART HOSPITAL, Garrett, is erecting a new \$80,000 addition which will practically double the capacity of the hospital.

DR. JOSEPH D. HEITGER, of Bedford, who has been ill in Louisville, Ky., with typhoid fever, is making a satisfactory recovery.

DR. J. T. SAMPLES of Boonville has been promoted from rank of first lieutenant to captain in the Medical Officers Reserve Corps.

DR. M. H. KREBS of Huntington has been promoted from the rank of captain to that of major in the Medical Officers Reserve Corps.

DR. AND MRS. J. D. WHITAKER of Indianapolis have been spending some time at Atlantic City and the Black Mountains, North Carolina.

DR. AND MRS. F. R. GOBBEL of English entertained the members of the Crawford County Medical Society and their wives to dinner in August.

THE Lutheran Hospital, Fort Wayne, is planning to enlarge its Nurses' Training School to help meet the demand for nurses incident to the war.

TAYLORSVILLE, Ind., a village of about 700 persons, is suffering from an epidemic of trachoma, sixty cases already having been reported.

THE new hospital at Marion was opened to the public on August 24, when many citizens inspected the institution at the "open house" reception.

FIELD HOSPITAL No. 1, an Indianapolis unit of the Indiana National Guard, left Fort Benjamin Harrison for Hattiesburg, Miss., on August 26.

NEW officers for the Fourth District Medical Society are: Dr. E. U. Wood, Columbus, president; Dr. John H. Green, North Vernon, secretary.

DR. C. C. SOURWINE of Brazil, now with Field Hospital Corps No. 1, Indiana National Guards, has been promoted from the rank of first lieutenant to captain.

THE Howard County Medical Society gave a banquet on August 13 in honor of Drs. Peters, Bannon, Marshall and Henderson, who have entered medical service in the army.

DR. C. E. PHIPPS, for some time physician at the Soldiers' Home, Marion, has been transferred to the National Military Home at Danville, which means a promotion.

DR. AND MRS. E. S. KNOX of Indianapolis spent the month of August in an eastern trip, visiting Washington, D. C., Atlantic City, New York, Montreal, Quebec, and Niagara Falls.

DR. PAUL BOWERS, physician in charge of the criminal insane at Michigan City, addressed the members of the Pulaski County Medical Association at their regular August meeting.

DR. W. A. LOFLAND, who recently removed from West Lafayette to Whittier, Calif., has passed the California state examination and been granted a license to practice medicine in that state.

ALBERT CALMETTE, director of the Pasteur Institute at Lille, and founder of the Pasteur Institute in Indo-China, has been called to Metchnikoff's place in the Pasteur Institute at Paris.

THE residence of Dr. Antonio Giorgi, Gary, was partially wrecked by a bomb on the night of August 27. The thrower of the bomb, as also the reason for such an action, has been a mystery.

A CAMPAIGN has just been completed for the raising of \$50,000 for a new modern hospital at Bloomington, Ind. Credit is due the Bloomington Council of Women for the success of this campaign.

DR. C. E. NUSSBAUM of Bremen has been appointed deputy coroner of Marshall County during the absence of Coroner Dr. R. C. Denison, who now is in the medical corps of the U. S. Army.

THE members of the Carroll County Medical Society held their annual picnic at Maxwell's Ford, on Deer Creek, August 15, and was attended by about 75 doctors, with their families and friends.

DR. B. M. EDLAVITCH, who has been in training at Fort Benjamin Harrison, has been released from further active duty in the Medical Reserve Corps, and has returned home and resumed practice.

DR. L. K. RYAN, graduate of Medical School of Northwestern University, 1916, one year on house staff of Wesley Memorial Hospital, Chicago, has located at Gary for the practice of medicine and surgery.

DR. JAMES A. RAWLEY, Brazil, left August 26 for New York City, where he will attend the New York Polyclinic School of Medicine. He will visit Washington, D. C., and Philadelphia on his return trip.

At the annual session of the Third District Medical Society the following officers were elected for the ensuing year: president, Dr. W. B. Bretz of Huntingburg, and secretary, Dr. Harvey K. Stork, also of Huntingburg.

THE American Pharmaceutical Association met at the Claypool Hotel, Indianapolis, the last week in August. Many important questions, incident to the war situation, came up for discussion. The meeting was largely attended.

A CABLEGRAM has been received announcing the safe arrival "somewhere in England" of Dr. A. E. Guedel, formerly superintendent of the Deaconess Hospital, Indianapolis. Dr. Guedel holds the rank of first lieutenant, and his orders will carry him to some base hospital in France.

THE marriage of Dr. Earl Holt, formerly of Indianapolis, and Dr. Pearl Hyatt of Washington took place at Cincinnati early in August. Dr. Holt holds a position on the staff of the State Hospital for the Insane at Longcliff, and Dr. Hyatt-Holt has received an appointment on the same staff.

THE Indianapolis City Board of Health has granted an indefinite leave of absence to Dr. Bernays Kennedy, attending gynecologist at the City Hospital. Dr. Kennedy holds the rank of major, and has been called for duty with Base Hospital No. 32.

MEMBERS of the officers' battalion at Fort Benjamin Harrison held a farewell banquet at Hotel Severin, Indianapolis, on August 23 before separating for the different army cantonments. A theater party at Keith's was another feature of the evening.

COLORADO recently has enacted a law prohibiting the division of fees by physicians, surgeons, chiropractors, midwives and chiropodists, and provides as a penalty a fine of from \$25 to \$250 or imprisonment not to exceed thirty days, or both fine and imprisonment.

ANNOUNCEMENT has been received of the resignation of Dr. S. R. Edwards as oculist and aurist to the Calumet and Hecla Mining Company, and of his new association with Dr. J. G. Huizinga at Grand Rapids in the practice of ear, eye, nose and throat diseases.

JOHN BYRON HARDY, 17 month old son of Dr. John J. Hardy of Plymouth (now located at the Main Dispensary, Great Lakes Training Station, Great Lakes, Ill.), died August 1 at Epworth Hospital after three and one half weeks' illness of septic meningitis.

THE members of the Ohio-Dearborn County Medical Society and their families enjoyed a picnic at the City Park, Aurora, on August 16, the affair having been planned to honor the physicians who have received commissions in the Medical Officers Reserve Corps.

THE conservation division of the United States Food Administration has been given the aid of an advisory committee on public health composed of the following members: Dr. W. H. Welch, chairman; Dr. Leonard P. Ayer, Prof. Herman Biggs, Dr. D. L. Edsall, Dr. Cary T. Grayson, Dr. A. W. Hewlett, Dr. T. C. Janeway, Dr. F. G. Novy, Dr. R. M. Pearce and Dr. H. Gideon Wells.

THE Princeton Sanatorium, Princeton, which recently has been taken over by the Methodist Hospital Board, to be known as a branch of the Indianapolis Methodist Hospital, will be dedicated on September 20. Many repairs and new equipment are being added to the hospital.

DRS. M. S. GRANT, pathologist and bacteriologist, and C. C. Grandy, roentgenologist, announce the establishment of pathological and roentgen-ray laboratories at the Lutheran Hospital, Fort Wayne, for general service and laboratory instruction.

THE physicians of Hartford City entertained the members of the Jay, Madison, Grant and Delaware-Blackford County Medical Societies at a banquet at the Hartford Hotel in August. Drs. W. A. Fankboner of Marion and L. F. Mobley of Summittville were the principal speakers.

THE members of the Dearborn County Medical Society enjoyed a picnic at the Aurora Chautauqua grounds on August 13, in honor of Drs. D. E. Johnston of Moores Hill, J. M. Jackson and O. H. Stewart of Aurora, who have received commissions in the Medical Officers Reserve Corps.

DR. WILLIAM B. GIBBS, colored physician appointed interne at the Indianapolis City Hospital, but discharged because of the action of the other internes in going on a strike because of association of the colored physician, was reappointed to the position on August 2, but declined to accept same.

THE original membership of the general medical board of the Council of National Defense has had to be changed from time to time owing to the entrance of members into service in the Army and Navy, and more than half the personnel of the original board is now in active service either in the United States or "somewhere in France."

FORT MCHENRY, Baltimore, has been converted into a military hospital, and buildings costing \$500,000 are being erected by the federal government. These buildings originally were planned for the use of the Immigration Bureau, but will be used as a base hospital by the army, and the old buildings at the fort also will be refitted for hospital uses.

AN examining unit of the army aviation corps has been established in Indianapolis, with headquarters in the Indiana University School of Medicine Building. Dr. J. G. Barnhill is directing physician of the unit, and is assisted by Dr. Frank A. Morrison, ophthalmologist, Dr. F. F. Hutchins, Dr. Daniel W. Layman, and Dr. Carl M. McCaskey. This is the central examination point for the state of Indiana.

DR. EDMUND D. CLARK, head of the Medical staff of Base Hospital No. 32, Indianapolis, entertained the members of the staff at a dinner at the University Club on August 29. The men were invited to meet Maj. H. R. Beery, who is to be in command of the military branch of the hospital, Capt. R. O. Wollmuth and Captain Byrnes, the latter being the oculist who is to accompany the unit overseas. Dr. John H. Oliver also was a guest at the dinner.

WASHINGTON, D. C., has appointed a woman food inspector, Mrs. Anne A. Repetti, whose duties will be to inspect soda fountains, restaurants and markets. Filthy and unsanitary conditions have come to light all over the city—marble-tiled lunch emporiums radiating cleanliness from the front, but with vile conditions in the kitchen; soda fountains where glasses seldom are washed, and markets where the handling of meat is such as to invite contagion. Mrs. Repetti is the first woman to be given this title and distinction.

THE forty-third annual meeting of the Mississippi Valley Medical Society will be held at Hotel Secor, Toledo, Ohio, on October 9, 10, and 11, 1917, under the presidency of Dr. Channing W. Barrett, of Chicago. An exceedingly interesting program has been prepared, on which appear the names of a number of Indiana men including Dr. Joseph Rilus Eastman, Indianapolis; Dr. William C. Moore, Summittville, Dr. Joseph D. Heitger, Bedford; Dr. Miles F. Porter, Fort Wayne; Dr. Charles E. Barnett, Fort Wayne; Dr. H. G. Hamer, Indianapolis; Dr. H. O. Mertz, LaPorte; Dr. Albert E. Sterne, Indianapolis, and Dr. W. W. Wadsworth, Muncie.

THEODOR KOCHER, Swiss surgeon, professor of surgery at the University of Berne, Switzerland, died recently, aged 76 years. He was the pioneer in operative treatment of goiter; has published over a hundred works on various branches of surgery, reporting important contributions to the science; and, with Fonio, he worked out the blood platelet extract which is an effectual means to arrest hemorrhage, of which extract he has given freely to the warring governments, as well as giving to them the technic for its preparation. He was awarded the Noble prize in medicine in 1909, and was at one time president of the German Surgical Association and president of the International Committee of the International Surgical Congress.

THE Columbia University War Hospital, given to the Government by Columbia University, is the first of the war hospitals to be completed, and is now ready to handle the wounded. The hospital contains 500 beds, and is so constructed that in case of need it may be enlarged considerably. The buildings all are portable, and could be sent over the seas or to any part of the United States in case of need. In addition to the buildings, small portable units will be kept on motor trucks ready for immediate dispatch to any place where accident of any kind might necessitate care of wounded. In this hospital medical students will receive instruction in the care of war wounded based on the experience of American and foreign soldiers in the present war.

FREDERICK E. SCHORTEMEIER, the executive secretary of the Indiana State Medical Association, was born in Shelbyville, Ind., March 25, 1889. He graduated from the Manual Training High School as class valedictorian in January, 1908, and received his B.A. degree from Butler College in 1912. During his four years at Butler College he held a place on the college debating team, and won first place in the interstate oratorical contest at Miami University in 1911. He attended Harvard Law School for three years, graduating in 1915 with the degree of Bachelor of Laws. For nine years he served as reporter and copy editor on the Indianapolis Star. During the fall of 1916 he was active on the Republican stump, and later was appointed private secretary to Senator Harry S. New of Indiana. He has written several economic and political treatises, has practiced law in Marion County for two years, and was instructor in public speaking at Butler College during the college year of 1916-1917.

Mr. Schortemeier was made executive secretary of the Indiana State Medical Association in the fall of 1916, and looked after the Association's interests at the last session of the state legislature.

SURGEON GENERAL GORGAS of the United States Army has outlined an intensive course in oral surgery for military surgeons, as follows: Dissection of the face and the oral neck, nasal, and orbital cavities. Sepsis: Treatment of sepsis in and about the mouth and floor; necrosis of the jaw bones. Drainage: Special points in the drainage of the fat tissues, accessory sinuses, floor of the mouth and neck. Fractures: Principles of fixation in the treatment of fractures of the maxilla and mandible;

splints and orthodontic appliances. Wiring of the teeth, Gilmer band splint, Gunning splint, Kinglesly splint, swedged splint, fixative bars, etc. Drainage in feeding of patients. Deformities: Bony defects—treatment of bony defects—Prosthetic—Martens splint, obdurators, dentures. Operative—Bone flaps, bone transplants. Malunion of fractures—Resection of the bones, correction by orthodontic appliances. Deformities due to scar contraction and absence of tissue. Operative release and repair. Making of flaps for the forehead, cheek, neck, chest and arm. Repair of defects in mucous membrane of the mouth by skin flaps. Correction by orthodontic appliances. Approach to the temporomandibular joints. Salivary fistulas. Local and intratracheal anesthesia.—*New York Medical Journal*.

THE War Service Committee of the Medical Women's National Association has organized the American Women's Hospital for work at home and abroad. The Surgeon-General of the Army and the General-Director of the Department of Military Relief of the American Red Cross have approved the provision made for service to the army and to the civil population. The work will be officially part of the medical and surgical service of the American Red Cross. The scope of the plan is a broad one. It includes units for maternity service and village practice in the devastated parts of the Allies' countries, and hospitals run by women for service there as well as for the United States Army in Europe. In this country acute and convalescent cases will be treated in hospitals equipped for the purpose; soldiers' dependents will be cared for, interned alien enemies will be given medical aid, and substitutes will be provided to look after the hospital service and the private practice of physicians who have gone to the front. The first units hope to go to France and Serbia in the early fall. Headquarters have been established at 636 Madison avenue, New York City. Dr. Rosalie Slaughter Morton is Chairman of the War Service Committee.

THE following physicians were granted licenses by the Indiana Board of Medical Examination and Registration to practice medicine in the state, through examinations taken in July: H. C. Brauchla, Indianapolis; Isabel M. Wason, Lowell; J. A. M. Aspy, Hope; W. A. Bagby, Scottsburg; S. S. Beverly, Peru; H. H. Botts, Sheridan; C. J. Bucher, Logansport; W. W. Carson, Evansville; G. M. Cook, Indianapolis; H. L. Foreman, Indianapolis;

W. F. Gessler, Marion; W. W. Gibbs, Indianapolis; J. L. Glendening, Indianapolis; V. D. Keiser, Indianapolis; K. M. Koons, Mulberry; F. A. Lampman, Indianapolis; J. S. Leffel, Connersville; C. L. Luckett, Terre Haute; P. V. Lynch, Indianapolis; E. G. Nelson, Laporte; W. A. Ohmart, Indianapolis; M. T. Patton, Indianapolis; F. B. Ronerts, Indianapolis; R. L. Smith, Indianapolis; L. E. Somers, Craigville; J. O. Thayer, Indianapolis; H. A. Walker, Indianapolis; Elmer Warner, Petroleum; Kathryn M. Whitten, Providence, R. I.; H. R. Willan, Indianapolis; G. H. Wisener, Indianapolis, and Dr. Chester N. Frazier, Bluffton, who received the highest grade of the 34 young men and women who passed the examination. Those granted licenses are graduates of the Indiana University School of Medicine, Northwestern College, Johns Hopkins University, and the Medical School at Louisville, Ky.

DURING the month of August orders have been issued to Indiana members of the Medical Officers Reserve Corps as follows:

To Fort Benjamin Harrison: Lieuts. George H. Hockett, Anderson; C. M. Williams, Kokomo; Arlie J. Ullrich, Aurora; Chester A. Stayton, Indianapolis; Henly Harvey, Boswell; Miles F. Daubenheyer, Butler; Carl B. Souders, Columbia City; Wilcox G. Thorne, Columbus; O. A. Tucker, Daleville; Samuel R. Laubscher, Evansville; Harry C. Odell, Farmersburg; Waldo C. Farnham, Elmer C. Singer, Fort Wayne; Brant E. Lemmon, Greencastle; John C. Glackman, Hatfield; Ray H. Thomas, Joseph F. Ward, Indianapolis; John C. Webster, Lafayette; James L. Walker, LaFontaine; Noah W. Clark, Roseville; Charles E. Stone, Shoals; Lyman A. Burnside, Terre Haute; Malcolm B. Fyfe, Wheatfield.

To Fort Oglethorpe, Ga.: Lieuts. W. C. Moore, Anderson; Charles P. Major, Indianapolis; Wallace C. Dyer, Evansville; James A. Sims, Pine Village.

To Fort Des Moines, Iowa: Lieut. Joseph H. Ward, Indianapolis.

To Fort Riley: Capt. George W. Newell, Peru; Lieuts. Smith A. Quimby, Indianapolis; Lawrence J. Quillin, Warsaw.

To Fort Snelling, Minn.: Lieut. Kenneth L. Craft, Indianapolis.

To Fort Douglas, Utah: Lieut. Albert G. Grubb, Mongo.

To Fort Sheridan, Ill.: Capt. William H. Lane, Angola.

To Indianapolis, for duty: Lieuts. Ernest D. Wales, Indianapolis; enlisting personnel of Red

Cross Ambulance Co. No. 18, M. B. Light, Indianapolis.

To report by telegraph to commanding general, Western Department, for assignment to duty, Lieut. Fredrick Falk, Indianapolis.

Resignations accepted: Lieuts. Fred E. Hickson, Indianapolis; Charles C. Moore, Owensburg.

Honorably discharged: Capt. Blanchard B. Pettijohn, Indianapolis.

THE building for the Indiana University School of Medicine will occupy the northeast corner of the Robert W. Long Hospital grounds. The main building will be 176 feet long by 55 feet wide, with the front wing 58 by 51 feet. It will be fireproof brick and concrete construction, with trimmings of Bedford stone, and so far as possible will match the Long Hospital building. It will be practically five stories high, with basement, ground floor and four floors for school purposes only.

The basement under the central portion will house the heating plant, freight receiving room, cleaning and other similar departments. Supplies will be delivered from the North Street entrance through a tunnel.

The dispensary will be housed on the ground floor. It will contain the departments of surgery, nose and throat, eye, skin diseases, obstetrics, tuberculosis, pediatrics, and nervous diseases. The central corridor, 14 feet wide and 176 feet long, the full length of the building, will be used as a waiting room for the various departments. In the front wing will be located the dispensary and social service department offices, dispensary waiting room and pharmacy. The dispensary patient will enter a large waiting room in the south wing of the building, where he will receive a card admitting him to the special department he seeks. He will then pass on to the waiting room in the central corridor and, after treatment, will be given another slip to obtain what he needs from the pharmacy. This dispensary department will be entirely separate from the remainder of the building. The offices of the dean, secretary, and a room for faculty meetings will be located on this floor. At the west end of the back wing will be the library and stock room, and at the east end will be a large lecture room and laboratory, with separate rooms for the departments of clinical medicine, surgery, and neurology for junior and senior students.

The second floor will be occupied by the departments of pathology, with laboratories and lecture rooms. In the center will be a small, dark room to be used as a museum. On this



INDIANA UNIVERSITY SCHOOL OF MEDICINE

floor will also be a large auditorium extending through the third floor. The balcony of this auditorium will be on the third floor level, and the whole will have a capacity of 500 seats.

The third floor will be occupied chiefly by the department of pharmacology, and the fourth will be devoted to the department of applied anatomy. Dog rooms, with open runways, will occupy each end of the fourth floor.

A number of details in the construction are still undecided, but final approval of the plans is expected within the next two weeks.

Robert F. Daggett is the architect.

CORRESPONDENCE

EXCUSE ME

LAFAYETTE, Ind., Aug. 29, 1917.

Editor THE JOURNAL:

In reply to Dr. Goble's communication in the last issue of THE JOURNAL, I am sorry I stepped on his sore toe, and beg his pardon for causing him so much discomfort.

GEORGE F. BEASLEY.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

NEODIARSENOL.—Neodiarsenol has the composition, physical and chemical properties and action, uses and dosage as given for neosalvarsan in New and Nonofficial Remedies, 1917. Neodiarsenol is supplied in ampules containing, respectively, 0.15, 0.3, 0.45, 0.6, 0.75 and 0.9 Gm. neodiarsenol. Neodiarsenol is accepted for New and Nonofficial Remedies, as the available supply of neosalvarsan seems to be insufficient to meet the demand, and this preparation conforms to the rules of the Council. Neodiarsenol is made in Canada under a license issued by the Commissioner of Patents of Canada. The Farbwerke-Hoechst Company holds the sale of neodiarsenol in the United States an infringement of its rights, and has stated that all violations of its rights will be prosecuted. The Diarsenol Company, Limited, Toronto, Canada (*Jour. A. M. A.*, Aug. 4, 1917, p. 383).

GASTRON.—A solution of the gastric tissue juice obtained by direct extraction from the mucosa of the fresh stomach of the pig. It contains 25 per cent. by weight of glycerin, 0.25 per cent. absolute hydrochloric acid, and 1 Cc. is capable of dissolving 200 Gm. of coagulated egg albumin. Gastron is designed for use in disorders of gastric function. Fairchild Bros. and Foster, New York (*Jour. A. M. A.*, Aug. 25, 1917, p. 645).

PROPAGANDA FOR REFORM

STANDARDIZATION OF SERUMS AND VACCINES.—The misunderstandings and difficulties as regards the standardization of serums and vaccines are pointed out by G. W. McCoy, Director of the U. S. Hygienic Laboratory. So far legal standards have been formulated only for diphtheria and tetanus antitoxin. A tentative standard for anityphoid vaccine has been devised. This completes the list of standardized biologic products. Though not standardizable, vaccine virus and anti-rabic virus are tested for potency in the process of manufacture. McCoy reviews the work which has been done in the attempt to work out and standardize other biologic products, and brings out the many difficulties which are in the way (*Jour. A. M. A.*, Aug. 4, 1917, p. 378).

BILE, A CHOLAGOGUE.—The view that bile absorbed from the alimentary tract increases the secretion of bile, and thus acts as a true cholagogue, seems to be established. The feeding of fresh bile to bile fistula dogs causes an almost constant cholagogue action. The bile of the dog, sheep and pig all have this effect, and ox bile seems to be the most active cholagogue. Of the bile constituents, glycocholic acid has a moderate cholagogue effect, but usually causes a great drop in bile pigment output in a bile fistula dog; taurocholic acid has a strong cholagogue action, but little inhibiting effect on bile pigment secretion; the bile fat has no influence on bile flow, but causes inhibition of bile pigment secretion; cholic acid has little effect on bile flow but may decrease the bile pigment output (*Jour. A. M. A.*, Aug. 4, 1917, p. 386).

ADMINISTRATION OF AGAR.—O. H. Brown and W. O. Sweek favor the administration of agar in the form of a hot lemonade, chocolate or bouillon. For the preparation of a lemonade they direct to take 2 heaping tablespoonfuls of the agar powder, flakes or shreds; add to 1 quart of water, and boil till the agar is thoroughly liquified; sweeten and add juice of one lemon; then drink the entire quart while hot. They suggest that the quart of hot agar lemonade may be prepared in the morning, poured into a vacuum bottle, and taken leisurely during the day. They find that patients prefer to make use of orange, grapefruit, vanilla, maple or other flavoring in place of the lemon (*Jour. A. M. A.*, Aug. 11, 1917, p. 467).

TRIMETHOL.—The Council on Pharmacy and Chemistry concludes that the claims for Trimethol are unsupported by acceptable evidence, and has declared Trimethol and the pharmaceutical preparations said to contain it—Trimethol Syrup, Trimethol Capsules and Trimethol Tablets—sold by Thos. Leeming and Co., New York, ineligible for New and Nonofficial Remedies. The Trimethol preparations are advertised for use in all conditions dependent on intestinal putrefaction, and some of the advertising claims give to "Trimethol" the scope of a panacea. A request for Trimethol having been refused by the manufacturers, the Council's bacteriologist examined one of the pharmaceutical preparations said to contain it. Although the preparation was found to be a germicide, the examination did not indicate that Trimethol had any remarkable potency or other properties suggesting that it possessed special therapeutic value (*Jour. A. M. A.*, Aug. 11, 1917, p. 485).

IODINE OINTMENTS.—An examination of iodine ointments made in the A. M. A. Chemical Laboratory by L. E. Warren demonstrated that when made according to the method of the U. S. Pharmacopoeia (dissolving iodine in potassium iodide and glycerine and then incorporating with benzoinated lard), about 20 per cent. of the free iodine used combines with the ointment base. On standing for a month a further quantity of 5 per cent. goes into combination, and after this no further loss of iodine occurs. The

Pituitary Liquid

½ cc ampoules

1 cc ampoules

The ideal preparation of the kind.

Entirely free from preservatives and objectionable chemicals.

Standardized by the Roth method.

For obstetrical cases, ½ cc ampoules.

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Powder and Tablets, 1-20 grain.
Red Bone Marrow—
(Medullary Glyceride) Hema-
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Kephalin—
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Elixir of Enzymes—
Digestant and palatable vehicle.
Pineal Substance—
Powder and Tablets, 1-20 grain.
Pituitary, Anterior—
Powder and Tablets, 2 grain.
Pituitary, Posterior—
Powder and Tablets, 1-10 grain.

composition of iodine ointment, U. S. P., after a month or more is approximately: free iodine, 3 per cent.; iodine combined with fat, 1 per cent.; potassium iodide, 4 per cent.; benzoated lard (containing combined iodine) 80 per cent. The U. S. Pharmacopoeia requirement that iodine ointment shall be freshly prepared appears to be unnecessary. It was also found that if iodine ointment is made without the addition of potassium iodide, practically all of the free iodine enters into combination with the fat (*Am. Jour. Phar.*, Aug., 1917, p. 339).

SOME MISCELLANEOUS NOSTRUMS.—Limestone Phosphate is devoid of limestone. It is a mixture of sodium bicarbonate and sodium acid phosphate, which when dissolved in water yields the ordinary sodium phosphate.—*Parmint*, according to the advertising, should be used for the treatment of catarrhal deafness, head noises, catarrh of the stomach, catarrh of the bowels, loss of smell, lung trouble, asthma, bronchitis, etc. *Parmint* appears to be an alcoholic solution containing sugar, glycerin, a small amount of chloroform and a mixture of volatile oils with oil of anise predominating.—*Varnesis* is a "rheumatism cure" which, when analyzed some time ago, was found to contain less than 1 per cent. vegetable extractives chiefly derived from emodin-yielding drugs and capsicum. Taken according to directions, its user consumes as much alcohol as he would obtain from the consumption of a half pint of raw whisky every four and one half days.—*Fruitatives* is sold under a meaningless statement of composition and with claims that suggest it to be a cure for paralysis, consumption, rheumatism, etc. It is probable that *Fruitatives* possesses no virtues not found in aloin, belladonna and strychnine pills. (*Jour. A. M. A.*, Aug. 18, 1917, p. 582).

SERUM TREATMENT OF PNEUMONIA.—Rufus Cole reports that one third of the cases of pneumonia are due to Type I pneumococci, one third to Type II pneu-

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monococci, from 10 to 15 per cent. to Type III, and the remainder to pneumococci belonging to the fourth group. The mortality from infection with Type I and Type II is of average severity with a mortality of from 25 to 30 per cent.; that from Type III is severe and more than one half of the patients die from this infection, while the mortality from Group IV is only about 10 to 15 per cent. Antipneumococcic serum is efficient only in infection from Type I, and Cole has come to the conclusion that the serum should be administered only after it has been determined that the infection is due to this type. He reports that certain commercial serums have been found inefficient or without effect against Type I infection. He also reports his experience with commercial serums which are inefficient or inert. It is expected that the U. S. Public Health Service will soon establish a method for the standardization of antipneumococcic serum (*Jour. A. M. A.*, Aug. 18, 1917 p. 505).

SOME MISCELLANEOUS NOSTRUMS.—Newspapers advertise Swift's Sure Specific for the treatment of "rheumatism" and "impure blood." The advertising matter sent out by its promoters recommends "S. S. S." for the self-treatment of syphilis. No information is offered in regard to the composition of "S. S. S." except that it contains 15 per cent. alcohol and the claim that it is "made from purely vegetable ingredients."—Kaufmann's Sulphur Bitters are claimed to contain sulphur, gentian, wild cherry, aloes, eupatorium, "Tanacetum," balmony, podophyllum, "Senna Indica," calamus. It was sold as a remedy for scrofula, catarrh, salt rheum, rheumatism, etc., but the government declared these curative claims false and fraudulent (*Jour. A. M. A.*, Aug. 25, 1917, p. 663).

TREATMENT WITH VACCINES.—The conditions—self-limited infections and chronic infectious processes—in which vaccine treatment has been employed make it exceedingly difficult to determine if vaccines are of value. As pointed out by J. P. Leake of the U. S. Public Health Service, whenever the use of vaccines in a certain disease has been carefully controlled, its use has been found of little value. This is true of whooping cough, typhoid fever and gonorrheal vulvovaginitis and probably in pyorrhea alveolaris. As for the strikingly favorable results in individual instances which are reported by vaccine enthusiasts and repeated in advertisements, these may all be matched by equally brilliant results in cases not treated with vaccines (*Jour. A. M. A.*, Aug. 25, 1917, p. 648).

NASOPHARYNGEAL DISINFECTION BY HYPOCHLORITES.—While the practical sterilization of infected wounds by means of hypochlorites has been effected, the sterilization of the nose and throat is far more difficult, especially in the case of diphtheria and meningococcus carriers. Encouraging results from the use of a hypochlorite substitute, dichloramine-T, have been reported, but these require confirmation (*Jour. A. M. A.*, Aug. 25, 1917, p. 651).

BOOK REVIEWS

THE SURGICAL CLINICS OF CHICAGO. Volume I, No. III (June, 1917). Octavo of 231 pages, 70 illustrations. Philadelphia and London. W. B. Saunders Company.

This third number contains a variety of clinics by quite a large number of Chicago surgeons, some of them very well known, others not so well known. In this abundance of good material something of value can be found by every practitioner. Those who follow up these clinics in each issue certainly find themselves well repaid in every sense of the word.

GYNECOLOGY. Volume IV of the Practical Medicine Series for 1917. Edited by E. C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago; and Sydney S. Schocket, M.D., Instructor in Gynecology, Northwestern University Medical School; Adjunct Gynecologist, Wesley Hospital, Chicago. Cloth, \$1.35. Price of series of ten volumes, \$10. The Year Book Publishers, Chicago.

The important contributions in the domain of gynecology made during the past year are reviewed by these two editors. They indicate briefly in their introduction the paths along which progress and changes have been made, and in the text they cover the literature quite thoroughly. All those interested in this branch of medicine ought to find this volume of much benefit.

PHYSICAL EXERCISE FOR INVALIDS AND CONVALESCENTS. By Edward H. Ochsner, B.S., M.D., F.A.C.S., President, Illinois State Charities Commission; Attending Surgeon, Augustana Hospital, Chicago. Illustrated. Cloth, 75c. St. Louis, C. V. Mosby Company, 1917.

In this little book the author describes briefly but clearly forty simple exercises which anyone can execute at his convenience at any time, anywhere, without apparatus of any sort. These exercises are proposed especially for the benefit of convalescents, invalids, and people engaged in sedentary work. They are so simple that they can be easily learned by anyone.

One of the best things the physician can do for those of his clientele who need such exercises is to get them this little book and assure himself that they take daily some, if not all, of the exercises outlined in this manual.

GENERAL SURGERY. Volume II of the Practical Medicine Series for 1917. Edited by A. J. Ochsner, M.D., F.R.M.S., LL.D., F.A.C.S., Surgeon in Chief, Augustana and St. Mary's of Nazareth Hospitals; Professor of Surgery in the Medical Department of the University of Illinois. Cloth, \$2. Price of the series of ten volumes, \$10. The Year Book Publishers, Chicago.

The reviewer takes the opportunity of expressing, in the introduction, an admirable tribute to the memory of John B. Murphy, who reviewed this volume every year until his death.

The new reviewer has covered the subject of general surgery in a very thorough and able manner. He has gone into the subject quite fully, and gives us all the details that are of any importance. His first attempt in taking up this work has turned out very successfully indeed. That his attempts in the future will be no less successful we do not doubt at all.

PRACTICAL URINALYSIS. By B. G. R. Williams, M.D., Director of Wabash Valley Research Laboratory, Author of "Laboratory Methods," etc. Illustrated. St. Louis, C. V. Mosby Company, 1916.

This little manual is intended to serve as a guide for student and practitioner in helping them to carry out the simple diagnostic tests with which they must become thoroughly familiar sooner or later. The author has presented this small book with the idea of emphasizing therein many of the little or minor points which are not infrequently lost or overlooked in the larger comprehensive works. His method of presenting the subject matter is very well suited for the purpose for which this book is to serve.

The majority of clinicians will not agree with the

(Continued on page XIX)

BOOK REVIEWS

(Continued from page 384)

author that "the twenty-four hours' urea estimation is the best laboratory procedure to determine the functional activity and possibilities of the kidneys." The prevailing idea is that the phenolsulphonephthalein test is the only single laboratory test that gives the most accurate and reliable information relative to renal function in the vast majority of cases.

COLLECTED PAPERS OF THE MAYO CLINIC, Rochester, Minn., Volume VIII, 1916. Octavo of 1014 pages. 411 illustrations. Cloth, \$6.50 net; Half Morocco, \$8.50 net. Philadelphia and London: W. B. Saunders Company, 1917.

The eighth volume of these collected papers of the Mayo Clinic is of such size that it contains more than one thousand pages. In order to keep the volume within that size the editor, Mrs. Mellish, states that it was necessary to omit entirely a few of the articles read or published by the Mayo staff in 1916, and to present several of them in the form of abstracts.

The papers contributed in this volume contain the valuable information contained in the tremendous experience which this organization enjoys. The information conveyed by them is valuable to every practitioner, no matter what his specialty may be. There already is a very large following among the profession who look forward each year to the appearance of the volume containing these collected papers of the Mayo Clinic, and who regard it as one of the most important and valuable publications of the year.

HANDBOOK OF ANATOMY. Being a Complete Compend of Anatomy Including the Anatomy of the Viscera, a Chapter on Dental Anatomy, Numerous Tables, and Incorporating the Newer Nomenclature Adopted by the German Anatomical Society, Generally Designated the Basle Nomenclature, or BNA. By Jacob K. Young, M.D., F.A.C.S., Professor of Orthopedic Surgery, Philadelphia Polyclinic; Associate Professor of Orthopedic Surgery, University of Pennsylvania; Orthopedic Surgeon to the Philadelphia General Hospital, etc. Fifth edition, revised and enlarged, with 154 engravings, some in colors. Cloth, \$2 net. Philadelphia, F. A. Davis Company, Publishers, 1917.

This book already is well-known by many past and present students of medicine and dentistry. It has served a very useful purpose in the past. The method by which the essentials of anatomy are given in this compend is such that the student finds this book of more value than the ordinary compends that are so abundant.

The author has taken the opportunity of meeting the demand for a new edition of this Handbook by revising those portions which needed revision in order to incorporate the recent advances made in this branch. He has introduced a large number of additions, and has made some eliminations, with many alterations. Clearer and better illustrations will be found in this volume. In addition, a special chapter on "Dental Anatomy," properly illustrated, has been contributed by Jos. L. Appleton, Jr., B.S., D.D.S.

By incorporating the new Basle nomenclature, or so-called "BNA," the author has made this compend more accurate and modern than any other "medium sized anatomical work."

Those who feel the need of such a work as this should not fail to become acquainted with the new revised edition of this Handbook.

(Continued on page xx)



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BOOK REVIEWS

(Continued from page xix)

PRACTICAL MATERIA MEDICA AND PRESCRIPTION WRITING. With illustrations. By Oscar Bethea, M.D., Ph.G., F.C.S., Assistant Professor of Materia Medica and Instructor in Prescription Writing, Tulane University of Louisiana; Formerly Professor of Chemistry and Professor of Pharmacology, Mississippi Medical College, etc. Second revised edition. Cloth, \$4.50 net. Philadelphia, F. A. Davis Company, 1917.

A good book on practical materia medica and prescription writing is one of the most urgent needs of nearly every student and practitioner of medicine. This work already has become known to very many of the profession. In the two years that have elapsed since the first edition of this work it has gained a large patronage and wide popularity. Those who have become acquainted with this book appreciate that it gives them practical materia medica and practical prescription writing by a clearer and better method than that given in most of the books on this subject.

With this new edition the author has brought the work fully up to date. Some new drugs have been added, and many have been dropped. Much new matter which the author hopes will be of value has been introduced in this volume.

The author has succeeded exquisitely in his purpose, which has been, he says, "to handle the subject-matter in such a practical way as to render the work a dependable one for every-day service."

THE TREATMENT OF EMERGENCIES. By Hubley R. Owens, M.D., Surgeon to the Philadelphia General Hospital; Assistant Surgeon to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases; Chief Surgeon to the Philadelphia Police and Fire Bureaus; Assistant Surgeon Medical Reserve Corps, U. S. Navy. 12mo volume of 350 pages with 249 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$2.00 net.

This book is intended primarily for instructors in first-aid work, for police and fire surgeons, for ambulance surgeons, for resident physicians, for nurses, and those laymen who desire to get more than a little superficial knowledge of that very important subject.

Although the author goes into technical detail to some extent it cannot be said that this book is too technical for the average layman. The latter should have enough knowledge to know what to do and what not to do in an emergency to render his interference beneficial rather than harmful or dangerous. In this new book the subject is presented in such a clear-cut and concise manner that the reader of ordinary intelligence can grasp therefrom just the knowledge he ought to have.

Criticism may be made of the author's method of using the sound leg as an emergency splint for fracture of the other leg, as shown in his illustration, Figure 48. Instead of tying both feet together one next to the other, a better method is to tie the one leg over the other whenever possible. At least that is the method taught the medical officers in our army.

The illustrations in this book are splendid in every way, both from the standpoint of photography and as pictures that convey a clear idea of what the author intends to illustrate. Such a book ought to meet with an enormous popularity.



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MEDICAL WAR MANUALS FOR DOCTORS WHO JOIN the medical corps of the United States Army. See announcement on front cover, this issue. **LEA & FEBIGER, Philadelphia, Pa.**

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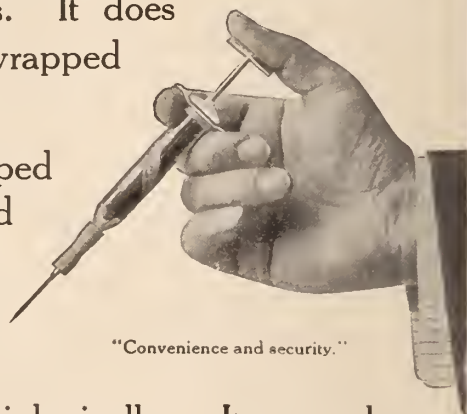
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THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under Direction of the Council

VOLUME X
NUMBER 10

FORT WAYNE, IND., OCTOBER 15, 1917

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CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
Coagulen (Kocher-Fonio). Personal Experiences in Eight Cases. H. K. Bonn, M.D., F.A.C.S., Indianapolis...	383		Nutrition		395
Some Observations Concerning Cataract and Its Management. W. F. Hughes, M.D., Indianapolis.....	390		Typhoid Epidemics		395
			The Evansville Session		396
			Helping Doctors to Help the People		397

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPT. 27, 28, 29, 1918.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879.

IMPORTANT ANNOUNCEMENT

The Medical War Manuals

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By EDWARD B. VEDDER, M.D., Lieut.-Col., Medical Corps, United States Army. Flexible waterproof covers with rounded corners, designed to fit the pocket of a uniform, and manufactured in style similar to the Drill Regulations. 12mo, 211 pages, thin paper, illustrated. Price, \$1.50 net.

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CONTENTS—Continued

	PAGE	MISCELLANEOUS	PAGE
Conservation of Food	397	Knitting for the Soldiers	394
More Kultur	398	Deaths	401
Editorial Notes	398	News Notes and Personals	402
		The Truth about Medicines	412
		Book Reviews	414
SOCIETY PROCEEDINGS			
Indiana State Medical Association	408		
Pulaski County Medical Society	411		

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Indianapolis, September 27, 28 and 29, 1918

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3d—Jos. D. Heitger, Bedford.....	December 31, 1919	9th—F. A. Tucker, Noblesville.....	December 31, 1919
4th—W. H. Stemm, North Vernon.....	December 31, 1917	10th—E. M. Shanklin, Hammond.....	December 31, 1920
*5th—Joseph H. Weinstein, Terre Haute...	December 31, 1915	11th—G. G. Eckhart, Marion.....	December 31, 1918
6th—O. J. Gronendyke, Newcastle.....	December 31, 1919	†12th—E. E. Morgan, Fort Wayne.....	December 31, 1916
		13th—H. H. Miller, South Bend.....	December 31, 1920

*No election held in 1915.

†No election held in 1916.

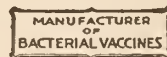
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Announcement of Committees for 1918 Will Be Published Later

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INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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VOLUME X

FORT WAYNE, IND., OCTOBER 15, 1917

NUMBER 10

ORIGINAL ARTICLES

COAGULEN (KOCHER-FONIO)

PERSONAL EXPERIENCES IN EIGHT CASES *

H. K. BONN, M.D., F.A.C.S.
INDIANAPOLIS

The apt truism that "a death from hemorrhage is the only inexcusable death, has been a source of stimulation in this effort to learn something of coagulen.

Fonio, chief surgeon in the district hospital of Langnau, Berne, Switzerland, was requested by his chief, Kocher, some years ago to attempt to find a physiologic styptic. As the result of many efforts, coagulen (Kocher-Fonio) was introduced into our therapeutics in 1912.

I have borrowed freely from Fonio's writings in the *Deutsche Zeitschrift f. Chirurgie*, the *Correspondenz-Blatt f. schweizer Aerzte* and other German journals and also hasten to acknowledge the debt to Engleman, Barth, Kausch, Obermueller, Littaur, Wohlgenuth and others for their contributions to the literature and case reports of coagulen usage.

Coagulen is a sugary, brownish-red powder, free from albumin, which contains the heat-resisting substances in animal blood causing coagulation. It is obtained by fractional centrifugalization and consists solely of blood platelets. Therefore, it is a physiologic styptic.

The various substances known as cytozym (Bordet and Delange), thrombokinas (Morawitz) and thrombozym (Nolf) are, as far as we know, contained principally in the platelets of the blood and show all the characteristics of a lipid. Mutschenbacher states positively that the blood platelets are the sole carriers of thrombozym.

PREPARATION AND DOSAGE OF COAGULEN FOR SUBCUTANEOUS, INTRAVENOUS AND ORAL USAGE

In preparing coagulen for use, the powder is simply dissolved in sterilized physiologic salt solution and then boiled for three minutes. Although some men have used a 10 per cent. solution, Fonio has never been able to observe any special advantage in the use of a concentrated solution and prefers a 5 per cent. dilution.

In a matter of emergency, coagulen may be dissolved in ordinary spring or well water and sterilized as usual, and the percentage of the solution need not be absolutely accurate.

As regards sterilizing the solution, this procedure is not absolutely necessary for bleeding of the nose, mouth or even for gastric hemorrhage. It is perhaps best that the solution be boiled for a short time immediately before use, but boiling should not be repeated more than two or three times, since the solution loses its effectiveness. Also, it is well to state at this point that the solution should not be kept longer than one day. The solution is more effective at a temperature of from 98 to 104 F.

A solution of coagulen is at first cloudy and on heating large flakes are formed. These flakes dissolve on repeated shaking, a procedure which should never be neglected before using the preparation. If coagulen is to be used intravenously, it is best to filter the solution through two or three layers of sterilized gauze, but finer filtration lowers the effectiveness of the solution.

Fonio has adopted a 3½ per cent. solution as serving him best for intravenous injection, the amount to be injected into the vein ranging from 30 to 70 cubic centimeters, according to the amount of blood lost by the patient.

Five grains of coagulen in all, whether by the intravenous or subcutaneous method, or both.

* Presented in part before the Indianapolis Medical Society, March 6, 1917.

monococci, from 10 to 15 per cent. to Type III, and the remainder to pneumococci belonging to the fourth group. The mortality from infection with Type I and Type II is of average severity with a mortality of from 25 to 30 per cent.; that from Type III is severe and more than one half of the patients die from this infection, while the mortality from Group IV is only about 10 to 15 per cent. Antipneumococcic serum is efficient only in infection from Type I, and Cole has come to the conclusion that the serum should be administered only after it has been determined that the infection is due to this type. He reports that certain commercial serums have been found inefficient or without effect against Type I infection. He also reports his experience with commercial serums which are inefficient or inert. It is expected that the U. S. Public Health Service will soon establish a method for the standardization of antipneumococcic serum (*Jour. A. M. A.*, Aug. 18, 1917 p. 505).

SOME MISCELLANEOUS NOSTRUMS.—Newspapers advertise Swift's Sure Specific for the treatment of "rheumatism" and "impure blood." The advertising matter sent out by its promoters recommends "S. S. S." for the self-treatment of syphilis. No information is offered in regard to the composition of "S. S. S." except that it contains 15 per cent. alcohol and the claim that it is "made from purely vegetable ingredients."—Kaufmann's Sulphur Bitters are claimed to contain sulphur, gentian, wild cherry, aloes, eupatorium, "Tanacetum," balmony, podophyllum, "Senna Indica," calamus. It was sold as a remedy for scrofula, catarrh, salt rheum, rheumatism, etc., but the government declared these curative claims false and fraudulent (*Jour. A. M. A.*, Aug. 25, 1917, p. 663).

TREATMENT WITH VACCINES.—The conditions—self-limited infections and chronic infectious processes—in which vaccine treatment has been employed make it exceedingly difficult to determine if vaccines are of value. As pointed out by J. P. Leake of the U. S. Public Health Service, whenever the use of vaccines in a certain disease has been carefully controlled, its use has been found of little value. This is true of whooping cough, typhoid fever and gonorrheal vulvovaginitis and probably in pyorrhea alveolaris. As for the strikingly favorable results in individual instances which are reported by vaccine enthusiasts and repeated in advertisements, these may all be matched by equally brilliant results in cases not treated with vaccines (*Jour. A. M. A.*, Aug. 25, 1917, p. 648).

NASOPHARYNGEAL DISINFECTION BY HYPOCHLORITES.—While the practical sterilization of infected wounds by means of hypochlorites has been effected, the sterilization of the nose and throat is far more difficult, especially in the case of diphtheria and meningococcus carriers. Encouraging results from the use of a hypochlorite substitute, dichloramine-T, have been reported, but these require confirmation (*Jour. A. M. A.*, Aug. 25, 1917, p. 651).

BOOK REVIEWS

THE SURGICAL CLINICS OF CHICAGO. Volume I, No. 111 (June, 1917). Octavo of 231 pages, 70 illustrations. Philadelphia and London, W. B. Saunders Company.

This third number contains a variety of clinics by quite a large number of Chicago surgeons, some of them very well known, others not so well known. In this abundance of good material something of value can be found by every practitioner. Those who follow up these clinics in each issue certainly find themselves well repaid in every sense of the word.

GYNECOLOGY. Volume IV of the Practical Medicine Series for 1917. Edited by E. C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago; and Sydney S. Schocket, M.D., Instructor in Gynecology, Northwestern University Medical School; Adjunct Gynecologist, Wesley Hospital, Chicago. Cloth, \$1.35. Price of series of ten volumes, \$10. The Year Book Publishers, Chicago.

The important contributions in the domain of gynecology made during the past year are reviewed by these two editors. They indicate briefly in their introduction the paths along which progress and changes have been made, and in the text they cover the literature quite thoroughly. All those interested in this branch of medicine ought to find this volume of much benefit.

PHYSICAL EXERCISE FOR INVALIDS AND CONVALESCENTS.

By Edward H. Ochsner, B.S., M.D., F.A.C.S., President, Illinois State Charities Commission; Attending Surgeon, Augustana Hospital, Chicago. Illustrated. Cloth, 75c. St. Louis, C. V. Mosby Company, 1917.

In this little book the author describes briefly but clearly forty simple exercises which anyone can execute at his convenience at any time, anywhere, without apparatus of any sort. These exercises are proposed especially for the benefit of convalescents, invalids, and people engaged in sedentary work. They are so simple that they can be easily learned by anyone.

One of the best things the physician can do for those of his clientele who need such exercises is to get them this little book and assure himself that they take daily some, if not all, of the exercises outlined in this manual.

GENERAL SURGERY. Volume II of the Practical Medicine Series for 1917. Edited by A. J. Ochsner, M.D., F.R.M.S., LL.D., F.A.C.S., Surgeon in Chief, Augustana and St. Mary's of Nazareth Hospitals; Professor of Surgery in the Medical Department of the University of Illinois. Cloth, \$2. Price of the series of ten volumes, \$10. The Year Book Publishers, Chicago.

The reviewer takes the opportunity of expressing, in the introduction, an admirable tribute to the memory of John B. Murphy, who reviewed this volume every year until his death.

The new reviewer has covered the subject of general surgery in a very thorough and able manner. He has gone into the subject quite fully, and gives us all the details that are of any importance. His first attempt in taking up this work has turned out very successfully indeed. That his attempts in the future will be no less successful we do not doubt at all.

PRACTICAL URINALYSIS. By B. G. R. Williams, M.D., Director of Wabash Valley Research Laboratory, Author of "Laboratory Methods," etc. Illustrated. St. Louis, C. V. Mosby Company, 1916.

This little manual is intended to serve as a guide for student and practitioner in helping them to carry out the simple diagnostic tests with which they must become thoroughly familiar sooner or later. The author has presented this small book with the idea of emphasizing therein many of the little or minor points which are not infrequently lost or overlooked in the larger comprehensive works. His method of presenting the subject matter is very well suited for the purpose for which this book is to serve.

The majority of clinicians will not agree with the

(Continued on page XIX)

BOOK REVIEWS

(Continued from page 384)

author that "the twenty-four hours' urea estimation is the best laboratory procedure to determine the functional activity and possibilities of the kidneys." The prevailing idea is that the phenolsulphonephthalein test is the only single laboratory test that gives the most accurate and reliable information relative to renal function in the vast majority of cases.

COLLECTED PAPERS OF THE MAYO CLINIC, Rochester, Minn., Volume VIII, 1916. Octavo of 1014 pages, 411 illustrations. Cloth, \$6.50 net; Half Morocco, \$8.50 net. Philadelphia and London: W. B. Saunders Company, 1917.

The eighth volume of these collected papers of the Mayo Clinic is of such size that it contains more than one thousand pages. In order to keep the volume within that size the editor, Mrs. Mellish, states that it was necessary to omit entirely a few of the articles read or published by the Mayo staff in 1916, and to present several of them in the form of abstracts.

The papers contributed in this volume contain the valuable information contained in the tremendous experience which this organization enjoys. The information conveyed by them is valuable to every practitioner, no matter what his specialty may be. There already is a very large following among the profession who look forward each year to the appearance of the volume containing these collected papers of the Mayo Clinic, and who regard it as one of the most important and valuable publications of the year.

HANDBOOK OF ANATOMY. Being a Complete Compend of Anatomy Including the Anatomy of the Viscera, a Chapter on Dental Anatomy, Numerous Tables, and Incorporating the Newer Nomenclature Adopted by the German Anatomical Society, Generally Designated the Basle Nomenclature, or BNA. By Jacob K. Young, M.D., F.A.C.S., Professor of Orthopedic Surgery, Philadelphia Polyclinic; Associate Professor of Orthopedic Surgery, University of Pennsylvania; Orthopedic Surgeon to the Philadelphia General Hospital, etc. Fifth edition, revised and enlarged, with 154 engravings, some in colors. Cloth. \$2 net. Philadelphia, F. A. Davis Company, Publishers, 1917.

This book already is well-known by many past and present students of medicine and dentistry. It has served a very useful purpose in the past. The method by which the essentials of anatomy are given in this compend is such that the student finds this book of more value than the ordinary compends that are so abundant.

The author has taken the opportunity of meeting the demand for a new edition of this Handbook by revising those portions which needed revision in order to incorporate the recent advances made in this branch. He has introduced a large number of additions, and has made some eliminations, with many alterations. Clearer and better illustrations will be found in this volume. In addition, a special chapter on "Dental Anatomy," properly illustrated, has been contributed by Jos. L. Appleton, Jr., B.S., D.D.S.

By incorporating the new Basle nomenclature, or so-called "BNA," the author has made this compend more accurate and modern than any other "medium sized anatomical work."

Those who feel the need of such a work as this should not fail to become acquainted with the new revised edition of this Handbook.

(Continued on page xx)



Why Oats Differ

Oat flakes differ because oat grains differ. Some are large and plump and flavory. Some are small, starved and insipid.

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is the maximum dose in adults and induces an energetic and prolonged action.

During an intravenous injection the patient should be watched carefully and the injection stopped if headache, cardiac pain, perspiration or any derangement of the eyes appear. I have never witnessed these symptoms in my limited experience. During an intravenous injection of coagulen given by an interne, the patient remarked that his head felt as if it were the size of a barrel.

In using coagulen subcutaneously it may be dissolved in 250 cc. of salt solution to avert the local pain which sometimes occurs.

Five to 10 grains of coagulen dissolved in milk, tea or water may be given by mouth and 5 grams is the usual maximum dose by mouth for children. Coagulen should not be used intramuscularly and personally I have had a large slough by using it in this manner.

Fonio has used coagulen in 700 clean cases and is of the opinion that, providing the directions are carried out in a proper manner, sepsis is certain and not interfered with by the preparation. Kausch in 300 clean cases, wherein he used coagulen, has never had an infection.

The danger of embolism or thrombosis in the use of coagulen does not and cannot theoretically exist, being proven, Fonio says, by the very considerable experience already had with it. However, he considers that coagulen is contraindicated in those conditions accompanied by changes in the vascular wall producing a tendency to thrombosis or embolism, for example, advanced stages of arterial sclerosis, certain stages of syphilis, phlebitis and aneurysms.

METHODS AND INDICATIONS OF APPLICATION OF COAGULEN

Local application of coagulen is the one most often indicated, since it serves an extremely useful purpose in the control of parenchymatous hemorrhages. Following release of gall-bladder adhesions, in parenchymal bleeding and also that from the spongy bones and the sacs of tumors, hemorrhage is controlled quickly and safely by the local use of coagulen solution.

It is interesting and instructive to note the Swiss and German viewpoints respecting the use of ligatures and coagulen. Kausch states that coagulen "renders superfluous most all bandaging and ligaturing," while Hotz considers that a ligature is much easier and simpler to use than to wait for coagulen to exert its properties and produce coagulation. In Fonio's opinion, Kausch and Hotz are both right and wrong.

Kausch goes too far in the use of coagulen, while Hotz does not go far enough. The borderline of the use of coagulen cannot, of course, be sharply drawn. There is a midpoint, so to speak, which we should strive to reach.

It is a matter of personal equation how far to go in arresting bleeding with coagulen. Technic undoubtedly plays a definite rôle. When one allows one's self plenty of time to grasp each minute bleeding point and feels obliged to make ligatures, it is but natural that this type of surgeon will hesitate to renounce his safe ligatures in favor of coagulen. But the man who operates rapidly and who does not clamp each bit of oozing tissue can make use of coagulen with good results.

Coagulen is strongly indicated in those operations which are unusually bloody, but it is a matter for the individual surgeon to decide for himself as to what extent he may discard ligatures. Fonio has stated that there is no doubt that coagulen can partly replace ligatures.

The styptic action of coagulen depends on the nature of the wound, particularly as relates to the roughness thereof. Hence, the rougher the wound surface, the quicker the blood platelets adhere to it, the sooner they disintegrate and the more pronounced the coagulation. When the wound consists of a smooth surface such as is found in a hernia, coagulen will stop all parenchymatous bleeding and also that from the small veins and smaller arteries. In the removal of spreading tumors and in prostatectomy where the wound surface is irregular, the bleeding usually comes from the larger blood vessels, which should be ligated. The only indication here for coagulen is where it is impossible to close the vessels and where packing is usually used, a coagulen tamponade being preferable to the ordinary packing.

The neck region, because of the danger of sudden blood pressure increase following operation, indicates that more ligatures should be used, because after coagulen usage a sudden coughing or choking attack may cause the thrombus to be dislocated and secondary hemorrhage to occur. Fonio regards the principal asset of coagulen therapy to be that it shortens the operation considerably, fewer ligatures are needed, the quicker coagulation saves blood and the operative field is more clearly defined. Most authorities agree that skull operations can be performed with much less loss of blood when coagulen is used. Large wounds may be closed without drainage because of the sure styptic effect of coagulen and healing is hastened, in

the opinion of those who have a right to speak with some degree of authority. Since the wound has no secretion and therefore the wound edges adhere more firmly, the cause of better coagulation is present.

It is to be noted that attention should be paid to the individual indication for the technic, and that one must adapt one's self accordingly. A combination of the various methods such as spraying and tamponage will give the best results when coagulen is used during operations.

COAGULEN USAGE AT THE OPERATING TABLE -- FONIO'S TECHNIC

Fonio proceeds as follows: A 20-c.c. syringe with a thin dull cannula of the caliber of an ordinary hypodermic needle and the usual sterilized gauze compresses form all the appurtenances necessary. The coagulen solution should be kept in a covered basin. It must be remembered that the coagulen solution is to be applied at the point of bleeding. The origin of the bleeding may be exposed by pressing the mop on the bleeding point and then quickly withdrawing it. The coagulen solution is then sprayed on this point.

Hemorrhages from the parenchyma are stopped quite rapidly by the spraying, but may be hastened by applying mops saturated with the coagulen solution. After a short period of application these styptic tampons are loosened very carefully so that the clots will not be disturbed. Brushing with the mop should be absolutely avoided, since all imperfections of the blood vessels are at once opened. The mop should be brought down directly on the bleeding point with moderate pressure and then carefully withdrawn in a like manner.

Frequently Fonio proceeds as follows: Bleeding blood vessels are grasped with clamps, and if there is profuse parenchymatous bleeding an assistant sprays the bleeding spots constantly or applies the styptic tampons. This method is particularly advocated for bloody operations.

If in spite of this procedure an artery continues to spurt, it is ligated at once or a clamp is applied and allowed to remain in the usual manner until the end of the operation when the styptic treatment is applied; if hemorrhage has been checked satisfactorily, the wound is washed with normal salt solution of the non-adhering clots and the bed of the wound carefully dried with coagulen mops. The entire wound surface is finally irrigated with coagulen solution and then closed.

Fonio has used coagulen by one method or

another in a great variety of operations, including goiters, upper jaw incision, in the removal of freely bleeding tumors, excision of the orbit, Förster's laminectomy and in other types of bone operation. He has also carried out several articular dissections without the use of either an Esmarch's bandage, a ligature or any other constricting bandage or device.

Coagulen has proven extremely useful in his hands in brain operations, sinus injuries, prostatectomies and Thiersch's methods of transplantation. In the last instance, Fonio believes that the coagulen method of preparation for the surface makes for thicker and broader skin transplantation.

Coagulen has been found to have a distinct place in rhinology and laryngology, affording a clear field during the operation and preventing secondary hemorrhage.

It may be of interest to the obstetrician to note that Fonio reports two cases of placenta previa in which he believes a great saving of blood was effected. In these cases, large quantities of the coagulen solution were injected into the uterus and the portio closed by the use of the hand to prevent the escape of the solution. Intravenous injection may also be used here.

Fonio suggests the oral use of coagulen in melena neonatorum and in hemorrhage from stomach and duodenal ulcers and likewise intestinal hemorrhage from typhoid perforation. However, intravenous injection in these conditions is much more efficient.

E. v. Meyer reports a case wherein a gastric hemorrhage following gastro-enterostomy was successfully controlled by coagulen, the drug being given by mouth immediately after the patient vomited. The author makes the point that coagulen must be used immediately after vomiting or, while the stomach is open and empty during the laparotomy.

Albrecht of Munich has achieved excellent results with a 10 per cent. coagulen solution in parenchymatous hemorrhages originating in the cul-de-sac after liberation of adherent pelvic pathology.

Juliusberger of Breslau reports a case of pulmonary hemorrhage of tuberculous origin wherein gelatin injections, morphin, ice, stypticin and seacornin failed to check the hemorrhage, but where coagulen promptly checked the bleeding.

Mutschenbacher of Budapest has used coagulen in one hundred cases of all varieties. He details a case of purpura hemorrhagica which entered the clinic because of an acute appendi-

citis. The patient had both arms and legs and the lower abdomen covered with petechiae. In one day the patient lost so much blood by mouth and bowel that he was practically exsanguinated. One hundred c.c. of 5 per cent. coagulen solution was given intravenously. No more petechiae appeared and no further bleeding occurred in the next four weeks, at which time he left the clinic.

Duschkow-Kessiakoff of Sophia reports the cure of a case of morbus maculosus werlhofii by the use of coagulen. Fonio has used coagulen in a similar case and deTarnowsky of Chicago likewise. These last two cases were benefited, but not cured, for the reason that one patient discontinued the coagulen when he thought he was well and in the other case, the supply of coagulen had been exhausted.

Coagulen treatment of hemophilia and the hemorrhagic diathesis is fully dealt with in all its phases in Fonio's recent contribution, but the author emphasizes that in this type of case the symptom-complex and not the cause of the disease is being treated, and therefore the deficient thrombozym is merely being replaced. Hence, a single hemostatic dose of coagulen is not sufficient in these cases, but many administrations must be made.

Hotz reports his use of coagulen in various operations such as liver wounds and release of gall-bladder adhesions. He has been particularly impressed by the use of coagulen in brain and skull work.

Hotz details extensively one case of the intravenous use of coagulen. This patient had pulmonary and knee-joint tuberculosis and had suffered from severe hemoptysis for twelve weeks before coming to the Friburg Clinic. He was given 20 c.c. of 5 per cent. coagulen solution intravenously and in the following six weeks there were no further hemorrhages.

Hotz's conclusions as to the present status of coagulen are as follows:

1. Coagulen is of distinct benefit as a prophylactic in those cases wherein unusual bleeding is apt to occur as in icteric patients.

2. It is to be used in those instances where mechanical means are futile to check hemorrhages such as those coming from the parenchyma.

CONCLUSIONS OF FONIO

A pronounced immediate effect, a sudden congealing of the blood, so to speak, is not to be expected of a fresh coagulen solution, nor is the solution expected to check a spurting artery. We must keep in mind that coagulen is a physi-

ologic styptic which decreases the time and increases the intensity of the process of coagulation. What occurs is that we add a certain amount of thrombozym to that already present. This thrombozym must combine with thrombogen to form thrombin which gives the impulse and transforms fibrinogen into fibrin. Coagulen quickens and reinforces all of these complicated processes.

Coagulen checks hemorrhages without harm and without irritation, because it remains entirely within the bounds of a physiologic process.

Coagulen treatment is not effective in those cases where a certain quality of blood contains too little or defective thrombogen or fibrinogen or where a substance is present which impedes coagulation.

When coagulen is used within the range of indications given, it will prove to be both a useful and important remedy.

CASE REPORTS

CASE 1.—City Hospital, service of Dr. J. R. Eastman. Patient, J. A., aged 35. Wassermann four plus. Thirteen days after a hernioplasty done by the house surgeon under the direction of myself, the wound began to discharge fresh blood, and this continued for forty-eight hours despite treatment. An injection of horse serum was given, large doses of calcium lactate were given by mouth and the wound was reopened and packed with adrenalin gauze at two different times, but the bleeding continued. Forty-eight hours after the bleeding began, I again packed the wound with 5 per cent. coagulen gauze after locating a definite point of oozing at the lower end of the wound where the cut edges of the aponeurosis of the external oblique had been sutured. There was no further bleeding. In view of the man's condition, however, I did a transfusion by the citrate method two days after the coagulen tamponade. There was no further bleeding and the patient recovered.

CASE 2.—Miss H., aged 42. A supravaginal hysterectomy and an enucleation of a fibroid in the left broad ligament were done by Dr. T. B. Eastman. Ten hours after operation the patient gave the most marked evidence of hemorrhage. Classic and typical symptoms were present. The ovarian and uterine vessels had been doubly tied at the operation. We, therefore, felt that the bleeding was coming from the bed of the fibroid, which had been packed lightly with one strip of gauze. A tube had been placed in the cul-de-sac. The following measures were used: An intravenous injection of 500 c.c. salt solution was given which resulted in temporary improvement lasting about thirty minutes followed by a relapse. A hypodermoclysis of 300

c.c. given following the intravenous injection produced the same reaction. Morphin, $\frac{1}{4}$ gr.; atropin, $\frac{1}{150}$ gr.; camphorated oil, 10 mm., and calcium lactate, 20 gr., subcutaneously, were all unproductive of results. At no time could this patient's pulse at the wrist be counted, nor was there any volume to it since she began to bleed. At this time, on percussion of the lower abdomen, a flat note was obtained, the area of flatness reaching almost to the umbilicus. The dressings were thoroughly saturated with bright red blood and a few clots were also present. The patient was very white, sighing respiration was present, pulse uncountable and heart tones muffled and weak. She appeared practically exsanguinated. Finally I gave the patient 25 gr. of coagulen subcutaneously and 50 gr. of coagulen intravenously, following this immediately with an intravenous injection of 1,000 c.c. of salt solution. The patient recovered, but discharged clotted blood through the drainage tube for two weeks.

CASE 3.—A. S., aged 25. Superficial injury to the dorsal surface of the right thumb, about $\frac{1}{2}$ inch long and $\frac{1}{8}$ inch deep. The cut had been bleeding profusely for thirty minutes before I saw the man, and was bleeding briskly at that time. As a matter of curiosity I dropped some coagulen powder into the cut after I had tried to stop the bleeding by all other methods excepting suturing. The bleeding promptly ceased.

CASE 4.—This case occurred in the practice of a competent colleague. In this instance I merely supplied a 5 per cent. coagulen solution for usage. I submit the doctor's report in his own words: "Mrs. O. L., aged 40, gave birth to an apparently normal boy, weighing $7\frac{1}{2}$ pounds, Jan. 28, 1917. At the request of the family, the child was circumcised when 3 days old. The foreskin was redundant and rather firmly adherent to the glans penis, and on breaking up these adhesions there was considerable bleeding partially controlled with hot sponges. The skin and mucous membrane were trimmed, but as far as known, the frenal artery was not severed. At no time was there any spurting of blood, but oozing was free and constant. Sutures were placed and a strip of gauze well covered with vaselin placed over the edge of the incision and tied in place. Free bleeding still occurred from the entire cut surface. A pressure bandage was applied and instructions given to watch the child carefully and to report if the bleeding did not cease. Six hours after the circumcision, there had been sufficient hemorrhage to saturate a heavy diaper. The sutures were removed. There had been quite free hemorrhage beneath the skin causing a discoloration of the tissues which were very edematous. Effort was made to ligate the frenal artery, although the bleeding was no more in-

tense at that point than elsewhere. The pressure bandage was reapplied. At this time the child showed the loss of blood plainly. An hour and a half later, a 5 per cent. coagulen solution was applied with a sponge and a clot formed in two minutes. A pressure bandage wet with coagulen solution was applied. There was no further hemorrhage. The mother of this child is a free bleeder, but the history of the remaining relatives is negative as regards a tendency to hemophilia."

CASE 5.—C. E., aged 50. Suprapubic prostatectomy by Dr. Bernhard Erdman. The prostate was of good size, difficult to enucleate and a decided suspicion as to malignancy was entertained. Some bleeding occurred when the Hagner bag was removed after forty-eight hours. A suction device attached to the house water supply was instituted on the day after operation, but was discontinued when bleeding recurred on the seventh day after operation. Vicious hemorrhage occurred at midnight of the tenth day, bleeding occurring from the wound, urethra and rectum. Horse serum, morphin, elevation of the foot of the bed and proctoclysis were without effect. The man was considered to be in a serious condition. Packing of the bladder also failed to check hemorrhage. I injected 15 gr. of coagulen intravenously and 30 gr. subcutaneously. The dressings were changed at this time. Two hours later there had been no further bleeding. Twenty days after the operation, hemorrhage recurred. The previous measures, horse serum, morphin and packing, were used without effect. Dr. Short then gave the patient 20 gr. of coagulen intravenously and there has been no further bleeding in the following four weeks.

CASE 6.—J. B., aged 73. Perineal prostatectomy by Dr. T. B. Eastman. There was no bleeding on returning the patient to his bed. Nine hours after operation, the pulse could not be felt, temperature was subnormal and a small stream of blood was running down the left leg. The bedding was saturated with blood as were the dressings. Timidity and false modesty on the part of an inexperienced nurse were the causes for the bleeding not having been observed and reported before my arrival. I injected 20 gr. of coagulen subcutaneously and 50 gr. intravenously at once, followed by an intravenous injection of 500 c.c. of sterile salt solution. There was no further bleeding in the next six days at which time I removed the perineal packing and substituted a small coagulen tamponade. No further bleeding occurred.

CASE 7.—Mrs. D., aged 30, curettage for retained secundines. Unusually severe hemorrhage ensued during the curettage and I packed the uterus with a strip of gauze soaked in 10 per cent. coagulen solution instead of the ordinary

packing. To my surprise, no observable drainage appeared for sixteen hours. To check this finding one week later, while operating a similar type of case I refrained from inserting coagulen gauze and found that drainage was present in the customary amount three hours after operation.

CASE 8.—Boy, aged 13. Depressed fracture of the left occipital area resulting from a direct blow. The depression was the size of a silver dollar. I removed all of the crushed bone, being able to do so without wounding the dura. However, at one point, the sharp end of a bone fragment had cut a small dural vein, which bled very freely when the compressing bone was lifted. I applied a 10 per cent. coagulen tamponade over the exposed dura for three minutes and was gratified to observe the absolute checking of the bleeding. I placed a coagulen tamponade beneath the skin flap before suturing the same and there was no further oozing, and the boy made the usual uneventful recovery.

I desire to express my appreciation of the kindness of the gentlemen who have permitted me to use coagulen in their cases and to incorporate reports of the same in conjunction with my personal cases.

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SOME OBSERVATIONS CONCERNING CATARACT AND ITS MAN-AGEMENT *

W. F. HUGHES, M.D.
 INDIANAPOLIS

Cataract may be defined as an opacity of the lens, capsule or both.

So many bases are used by different writers in the classification of cataract that we have a very long list of different varieties. It is the writer's aim to mention only the common varieties, and the time allotment for this paper has made it necessary to limit the consideration chiefly to the ordinary senile cataract.

On the basis of progressiveness cataracts are divided into stationary and progressive. On the basis of etiology, the most common varieties of progressive cataracts are as follows: senile, traumatic, diabetic. The location of beginning opacity divides cataracts into the anterior and posterior capsular, anterior and posterior polar, pyramidal, lamellar, cortical and nuclear.

Although the genesis of senile cataract has received almost constant investigation for ages, its solution is still in the future. Many investigators still regard it as a physiological change prevented from becoming universal by the failure of most individuals to reach the required age. One class of theories search for the cause in the lens itself. Becker, in 1876, attributed the condition to an irregular sclerosis of the lens. When the lens becomes condensed it exerts a tension on the peripheral parts. The water given up in the sclerosing process is taken up uniformly and harmlessly by the surrounding lens fibers in the normal change. However, in the faulty sclerosis the water clouds the lens and initiates a disintegration of the cortical lens fibers. This theory apparently fails to explain why this irregular sclerosing process occurs in only a small per cent. of senile lenses. The hypothesis also fails to explain the origin of many rarer forms of cataract.

Schoen places the cause of senile cataract in the accommodative effort. Continued hard pulling produces small detachments of the lens capsule and thereby starts an abnormal process. Since cataracts rarely develop in early life when the mechanism of accommodation is most active and the hyperopes are not more liable to senile cataract, this hypothesis is not widely accepted.

Peters advanced the chemico-physical theory which claims that a difference of pressure normally is present between the lens and aqueous. An increase in the molecular concentration of the aqueous from an increased quantity of salt, due to senile changes in the secretory organs, would probably disturb the normal selection between the lens and aqueous and thereby lead to a condensation of the lens substance. Since it has been demonstrated that the molecular concentration of the blood and aqueous varies harmoniously and that a large increase of salt in the aqueous is quickly absorbed, this hypothesis has been generally abandoned.

A group of theories has been advanced for ages which considers cataract a disease, depending upon some pathological disturbance of the entire organism. The fact that both

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eyes are usually affected in senile cataract strongly hints some underlying general cause. Rather recently, Roemer has proposed a theory in regard to the etiologic relations of the general organism to senile cataract which has appealed to the writer very strongly. It is termed the biological. The theory is based upon the idea that a cytotoxic process takes place in the epithelium and fibers of the lens. Normally the capsule and epithelium of the lens protect and prevent the escape of its constituents. Their destruction or injury starts an abnormal diffusion between the lens and its surrounding fluid. The death and destruction of this protecting tissue in senile cataract is assumed to be due to a direct toxic action upon the cells and fibers of the lens by the same or similarly toxic agent as is seen in the diabetic cataract. It is a metabolic disease of the lens. Its nature and origin are unknown at the present time, just as it has been impossible so far to demonstrate the exact toxic product which produces the diabetic or naphthalin cataract. The study of hemolysis gives some ground for the solution of the problem. Many chemically defined substances, independent of isotonic conditions, have been shown to destroy the red blood corpuscles. Since a large part of the body cells are being destroyed physiologically, autotoxins must be prevented from producing harmful results by regulative devices. With the increased destruction of body cells in advancing years more toxic substances must be constantly thrown into circulation. Therefore it is at least possible for antibodies originated in the blood to possess a specific affinity for some constituents of the lens capsule or epithelium. Since the regressive changes in metabolism and senile cataract are closely associated, and the protective structures of the eye are usually below normal in the affected one, the writer is inclined to believe that one or more toxic substances will be demonstrated as the etiological factor in diabetic and senile cataract. Of course, this theory is not advanced to apply to all forms of lenticular opacity, but principally to the common subcapsular cortical variety.

An increasing myopia in an individual past 45 is a prodromal symptom of senile cataract. Whenever a history is given that a presbyope has discarded his plus glasses and the "second sight" is coming on, the physician should at once be on the lookout for a beginning senile cataract. The increase in the refraction is due to an increase in the density of the lens. Monocular multiple vision often precedes the

diminution of visual acuity. In the early stages, the amount of interference in vision is due to the location as well as the density of the opacity. Every opacity begins at one or more special spots. These may remain stationary, often without producing subjective symptoms. The objective examination shows a white or greyish white opacity immediately back of the pupil.

This must be differentiated from sclerosis without opacification by focal illumination, the catoptric test, and the use of the ophthalmoscope. The ophthalmoscope shows opacities as black dots or striae. This is the real diagnostic sign of a beginning cataract. When the opacification reaches the stage where the retinal reflex is gone, the examination is limited to inspection and focal illumination. The senile cataract is differentiated from the membranous exudate in the pupil by the adhesions of the exudate to the pupillary margin and the absence of the normal reflexes in the latter condition. In differentiation the eye with an incipient senile cataract may be characterized by a normal cornea, slightly shallow anterior chamber, normal pupil with its healthy light reactions, no pain, photophobia nor ciliary injection, a reduced visual acuity and opaque spots or striae in the lens.

The prognosis of an incipient cataract in regard to its progress towards maturity depends very largely upon the general systemic condition of the patient, especially with reference to the eliminative functions and the condition of the nutritive ocular structures. In addition to the above, the prognosis of the operative treatment depends upon the state of the adnexa, conjunctiva, and iris, as well as the retina and optic nerve.

The treatment consists of a medical and surgical stage. In the incipient stage the treatment is generally limited to general measures. Primarily, the general health must be kept at the highest possible level. Careful attention to the eliminative functions is a very necessary part of the medical treatment. Prolonged instillations of solutions of potassium iodide, dionin, etc., as well as subconjunctival injection of cyanide of mercury have their advocates but are not generally considered of distinct therapeutic value.

The removal of a mature cataract when associated with a normal eye may be advisable for the purpose of securing a restoration of the normal visual field. In all such cases the object of the operation should be fully explained to the patient prior to the removal. The aniso-

metropia usually makes a correction of the resulting refractive error unsatisfactory.

Of course the ideal time for the cataract extraction is shortly after the lens has become completely opaque and the pupillary reflex has entirely disappeared. However, in slowly forming cataracts it is frequently desirable to remove a lens in which the maturation is incomplete. The final results compare very favorably to those removed in the ideal stage of maturity, although needling is required more frequently when the intracapsular operation is not done.

The general health of the patient is often a problem for solution before the extraction is attempted. It must be brought to the highest level possible for the particular patient. Severe cough, diarrhea, advanced nephritis and extreme anemia are usually considered general contra-indications for the operation. Active trachoma, infectious conjunctivitis and disease of the lacrimal apparatus are local contra-indications which must be removed before the extraction is considered.

Antiseptic ointments and solutions are often applied as a routine measure for several days preceding the operation. For the past year the writer has depended upon active sterilization of the conjunctival sac at the time of operation in all cases where the clinical as well as the bacteriological examination showed no evidence of infection. With the folds of the conjunctival sac smoothed out, which can easily be done by proper lid elevators, the eye is thoroughly flushed with a 1 to 2 thousand bichlorid solution. This irrigation should be followed immediately by one of sterile water. No instance of infection and practically no accumulation of mucus following the bandaging of the eye has occurred.

The writer used five instillations of a 6 per cent. cocain solution at three-minute intervals, with one instillation of 1-1000 adrenalin two minutes before the operation. One drop of the cocain solution is put in the eye which is not to be operated in order to reduce its sensibility to light. The incision involves about the upper 2/5 of the cornea in the corneoscleral junction with a conjunctival flap. In my opinion the conjunctival flap is a very important part of the incision. By care the slight annoyances of the flap are overcome. The hemorrhage may usually be prevented from entering the anterior chamber by turning the flap back over the cornea and making slight pressure on the area with a moist cotton sponge.

The iridectomy should be done without asking the patient to turn the eye downward. The anterior capsule has been treated in an almost innumerable number of ways. The object in most procedures is to release the lens, and to prevent secondary cataracts, postoperative infection and glaucoma. The prevention of secondary cataracts is most effectively secured by leaving no pockets containing cortical matter. This is best accomplished in removing practically the entire capsule by the use of the capsule forceps. Of course, their use is only feasible when the content of the anterior chamber is transparent. In thickened capsules it is occasionally necessary to make an incision into the capsule before the dense membrane can be removed with the forceps without undue traction on the zonule. Preliminary capsulotomy involves the idea of an extra operation, but certainly should be considered in connection with the removal of immature cataracts.

The expulsion of the lens requires patient, gently applied pressure. Harm is more often done from haste in this stage of the operation than from almost all other causes combined. When the lens will not advance with moderate pressure it is the imperative duty of the operator to ascertain the cause rather than employ undue force. If the capsule is insufficiently ruptured it can be done easily at this stage with either the cystotome or capsule forceps. When the lens advances to the incision and is checked by an inadequate cut for the particular lens, the wound should be enlarged at once, without any attempt to force it through the opening. Excessive pressure at this stage must either rupture the zonule or scrape off a large portion of the cortical substance. Frequently the edge of the lens will engage in the wound, but will be materially retarded by the posterior lip of the incision. The sharp needle or the point of the cataract knife itself are almost indispensable instruments for lifting the lens forward at the same time the steady moderate pressure on the cornea below the lens is continued. Of course, the rupture of the zonule prior to the extraction of the lens calls for the use of the wire loop or spoon at once.

The removal of the cortical matter should receive careful attention. With careful manipulation the irrigation of the anterior chamber need only be used rarely. Upward stroking of the cornea will usually push the cortical matter to the upper part of the anterior chamber at least. It can be drawn out by the suction

power of an ordinary medicine dropper with a rather large opening. Usually it is unnecessary to introduce the tip of the dropper past the edge of the incision.

After the edges of the incision have been cleared of debris and the iris has been restored to its proper position, the conjunctival flap should be carefully replaced. The writer has practically replaced the use of the speculum by the elevators. With a reasonably careful assistant the lids can be kept under complete control, which is impossible when the speculum is used, and the necessity of having the patient look downward during the iridectomy is removed.

The writer's experience with the Smith operation has been limited to the observation of other operators a number of times and three cases of his own. This experience will be summarized as follows:

In Case 1, the incision and iridectomy were made according to the Smith plan, but after making what was considered a reasonable effort with no results, the capsule was ruptured and the lens removed in the usual manner.

In Case 2, the lens was assisted in its passage through the incision by the sharp needle. Otherwise there were no complications.

In Case 3, the lens was extracted without complications or especial difficulties.

The healing of none of these cases was very satisfactory. While there was no corneal infection in either case, yet each showed a wide, rough corneal scar for a rather long period of time. In Case 1, this was complicated by an interstitial keratitis involving the greater part of the corneal flap, which greatly interfered with the final results.

While the writer believes that the operation can be done reasonably safely by the ordinary careful operator in a majority of cases, he is convinced that the location of the incision is not conducive to rapid healing, nor the most solid scar.

The postoperative dressings should be as light and simple as it is possible to use and hold the eye pad firmly in position. Many operators prefer the adhesive strips to the roller bandage from the first. An antiseptic ointment over the closed lids is a valuable precautionary measure of preventing infection. Operated eyes are best protected by a shield or mask placed over the regular dressing. Much harm is occasionally done by the operator attempting to see the condition of the entire incision at the end of the first twenty-four-hour period. With little or

no discharge, an absence of edema and redness about the edge of the lids, and practically freedom from pain, it is usually unnecessary to open the lids for an inspection of the operative field. In practically every instance a prolapsed iris will make its presence known. The period of time in which the patient must be kept in bed must necessarily vary, depending on the physical condition of the patient as well as the views of the operator. The writer is inclined to keep the patient confined in bed for several days with both eyes closed, unless contradicting conditions arise. The operated eye will certainly be kept quieter under such a régime than with the good eye exposed to the light.

The combined operation, although requiring an additional step in the procedure, is usually the operation of choice, since the extraction is much easier and the danger of iris prolapse is distinctly lessened. Because of the several disadvantages of the preliminary iridectomy, such as increased risk of a double operation, greater amount of astigmatism, etc., the single operation is usually preferred. However, in immature cataracts and eyes which have been subject to attacks of iritis, the preliminary iridectomy should be considered.

The most usual general complication in the operation is muscular spasm, ranging from squeezing of the lids to general epileptic seizures. Force is occasionally necessary to control the situation. Variable degrees of delirium may occur in the first thirty-six-hour period. It is best treated by removal of the bandage from the good eye, placing the patient in the upright position and liberal doses of nerve sedatives. Pulmonary congestion is an indication for immediate change from the reclining position. Distinct decrease of the urinary secretion as well as other signs of uremia must receive prompt attention.

Locally, the falling of the iris in front of the knife is usually of little consequence when the combined operation is to be done. Hemorrhage into the anterior chamber is an annoying complication which contradicts the use of the capsule forceps, but otherwise it is of little significance. If excessive it may be removed partially by slightly opening the wound and making stroking pressure on the cornea. Much may be removed by gentle application of moist cotton sponges to the incision. The writer doubts the advisability of irrigating the anterior chamber prior to the extraction of the lens.

Partial or complete dislocation of the lens

in the cataract operation is a very serious complication. It can only be extracted by the use of some form of wire loop or spoon. Loss of vitreous at any stage of the operation means a rupture of the hyaloid membrane or zonule usually produced by undue external pressure or due to accidents from instruments while within the globe. Predisposing causes are found in the fluid vitreous and an improperly placed incision. Loss of vitreous before the lens has been extracted is an unfortunate complication, since the lens must be lifted from the eye. After an escape of the vitreous has occurred, it is necessary to finish the operation at the earliest possible moment. The patient should be placed on his back for 18 to 24 hours. A special nurse during this period is almost essential.

A delayed reestablishment of the anterior chamber indicating a failure of the incision's margins to unite is usually not of serious import. The removal of the eye pad will generally be the extent of the treatment needed. Occasionally the edges of the incision will require an active stimulation such as mild cauterization or freshening with a curette. Intraocular hemorrhage means the complete loss of sight and very frequently an enucleation. Treatment except prophylactic is of little or no avail. A corneoscleral suture is of value when an attempt is made to save the globe. Postoperative iritis is probably the most frequent complication of the cataract operation. While usually of a mild type, probably irritative in character, occasionally it takes on the destructive plastic variety. The treatment should follow the usual course pursued in ordinary iritis. If the luetic and diabetic etiological factors can be eliminated the intense administration of salicylates is often of value.

Infection in the line of incision must be treated along the lines followed for corneal supuration. The isolation of the organism should be secured at the earliest opportunity, as this will often enable the oculist to use specific measures without losing valuable time. Prolapse of the iris is a very annoying sequela. If detected within the first 24 hours it is generally thought advisable to either replace or excise it. When the incarceration has been firmly established and the iris exposed to the infective agents, most surgeons prefer to leave the condition for future consideration. If the incarceration continues sensitive the prolapse should be excised under as strictly antiseptic precautions as possible. Glaucoma, which de-

velops occasionally, must be treated as the primary variety.

The visual results of the cataract operation vary so widely that it is difficult to gain much definite knowledge from statistics. Since the standards set up by the different authors is not a common one, a large per cent. of the cases fall in a group where the result will be considered good by one standard and bad by a second. With the standard of 1/10 visual acuity from 4 to 8 per cent. of operated cases are classed as bad results. Iridocyclitis, secondary cataracts, hemorrhage into the vitreous cavity and glaucoma are usually responsible for the unsatisfactory results.

Much carping criticism is indulged in concerning the nation wide practice of women in knitting for soldiers. In many quarters we hear the statement made that women, and especially the well-to-do, are wasting their time knitting socks for soldiers when socks of a good quality may be purchased from manufacturers at 15 cents to 18 cents per pair, and a good quality of light wool socks may be purchased from the quartermaster's department of the government at 13 cents per pair. A woman's time required in knitting a pair of socks may be worth more than 13 cents to 15 cents, but isn't it a little far fetched to criticize a movement which is encouraging patriotism and sacrifice, to say nothing of taking some burden from the overworked manufacturers as well as giving our boys in the army warm garments that, according to all reports, are scarce and hard to obtain even through government channels? A soldier on furlough from one of the western camps reports that almost every man in his camp has from one to three sweaters and enough socks to last him for the next five years, all furnished by patriotic women of the country. Even if this statement were true, and the chances are that it should be discounted to some extent, the fact remains that there are many boys in service who are not supplied with sweaters and socks, to say nothing of some other comforts that they should have, and the fault does not lie entirely with the Government when the unprecedented demand for equipment cannot be supplied promptly. By all means let the women of this country keep on with their work as it is one of the ways that they can help in winning the war, for to add to the comfort of our soldiers is to make a better and more effective fighting army.

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EDITORIALS

NUTRITION

It may be said without fear of contradiction that not enough attention is paid by physicians in general to the subject of nutrition. It may even be said that there is but very little known about the science of nutrition by the average general physician. Yet this subject is always of great importance to the physician, and, in these days, it is of paramount importance not only to the profession but to all humanity.

Questions relating to nutrition are not often put up to the physician by healthy individuals. The latter in health decide such questions for themselves. Since there is so much general ignorance with reference to nutrition, errors are quite common. It is very well known that usually people everywhere—especially in this country—eat too much. The consequences of such over-eating are manifested by various digestive disturbances and the associated disturbances or changes resulting therefrom. That such disturbances and changes are numerous every clinician of experience knows. On the other hand, individuals who subsist on a diet properly selected and regulated according to the principles of scientific nutrition are entirely free of all such disturbances and symptoms, and seem to be much more vigorous in every way than those in the former class.

In disease, nutrition is quite an important factor, and is one which the physician must not disregard. In disease the physician becomes the sole "food dictator." As such he must see that the patient gets a sufficient amount of food which will supply him with the necessary number of calories he requires daily. Moreover, of the food consumed by the patient there ought to be the proper balance between the proteid, fat, and carbohydrate intake. The physician must know not only the normal requirement and balance, but when and how he may vary them in the individual case. Obviously in the management of the so-called disease of meta-

bolism such knowledge is absolutely essential, but even in many other types of disease as well such knowledge is almost—if not quite—as essential in the proper management and treatment of the condition.

Aside from its bearing on health and disease, the science of nutrition at present is of increased importance because of its bearing on the problem of the conservation of food. If it is true that our people eat more food than they need and more than is good for them, there must be a very large amount of food actually wasted every day. That such is really the case there is no doubt. Here is just where the physician can use his efforts with striking effect. It is not enough to tell our people that they are wasting food by consuming more than they need. They must be taught in such a way that they can clearly and plainly understand the elementary principles of scientific nutrition. Who is better qualified or better able to undertake such teaching than the physician? But, first, let the physician be sure that he knows and understand those principles himself.

TYPHOID EPIDEMICS

There has been a most remarkable prevalence of typhoid in many parts of Indiana during the month of September. A few towns with an excellent water supply have had an unusual number of cases. To some persons these epidemics seem impossible while to others it means that the waters are not as safe as they might be.

Most physicians have an idea that most cases of typhoid are directly traceable to an infected water or milk supply. Under conditions where it is possible to detect the source of typhoid from either water or milk in 50 per cent. or more of the cases of typhoid the source cannot be determined. The majority of cases of typhoid, except in the cases of larger epidemics of typhoid, occur sporadically.

It seems to us that it is safe to say that typhoid deaths represent only about 1 per cent. of all persons actually infected with typhoid bacilli at that time. A large experience shows that of 100 persons infected with typhoid 4 persons become typhoid bacilli-carriers for a longer or shorter time. Thus, if a city had a typhoid death rate of 24-28 per 100,000 almost a hundred bacilli-carriers would be added to the population each year.

Our figures may be somewhat too large, but they do give some conception of the multiplica-

tion of possible sources of infection for any person who is not immune to typhoid fever.

Now if the medical department of the U. S. Army is unwilling to assemble large numbers of susceptible young men together where it has absolute control of the water and food supply and other sanitary conditions, it would seem absolutely foolhardy for a city health board with its limited control of water and milk and its meager control of personal and other hygienic conditions to allow its susceptible citizens to go unvaccinated against typhoid.

THE EVANSVILLE SESSION

The registration at the Evansville session was 270. Considering the fact that the meeting place was at the extreme end of the state, that many members of the Association have gone off to war, and still others were unable to attend in consequence of the strenuousness of the times, the attendance at Evansville was very creditable. Furthermore, the scientific papers and the discussions were of unusual excellence, all things considered.

The purely business affairs of the Association centered on the work of the executive office and the recommendations of the Committee on Administration that all of the business affairs of the Association be conducted by the executive office. There was a very decided difference of opinion as to the advisability of concentrating everything in one office, and especially concerning the recommendation of the committee that the business management of *THE JOURNAL* be transferred to the executive office. Among most of the members it is a recognized fact that the affairs of the Association for several years have been managed economically and well. There have been no duplications of duties, with the possible exception of the work of a few committees, and such duplications are of minor importance. The widening of the scope of the Association through the establishment of an executive office, and the coordination of the various activities for more effective results, was recognized as a move in the right direction, but it seemed to be the almost unanimous opinion of the delegates that this need not upset the working of the activities of the Association that have been established and are working economically and well, and especially when radical modification of the plan is of questionable value and might work a detriment. It was recognized that the executive office could materially assist in the effectiveness of the Association by work

in connection with the organization of the county medical societies, the work of the committees of the Association, and in looking after the interests of members in connection with medical defense, the Workmen's Compensation Act, and various other medico-public activities. Aside from this there is the great work of organizing for the protection of existing medical laws and in putting forth efforts to secure other legislation of a medical nature for the benefit of the public. In carrying on these activities the Association will have the active cooperation of *THE JOURNAL*, of all the officers of the State Association, and the officers of county medical societies. That a great work can be accomplished by this cooperation is unquestioned. In furtherance of the plans, the Association took final action on the question of raising the dues, and hereafter the dues will be \$4 instead of \$2 as heretofore.

The election of officers resulted in the selection of Dr. Joseph Rilus Eastman of Indianapolis, as president; Drs. V. V. Cameron, Marion; H. H. Martin, Laporte, and E. A. Sturm, Jasper, as vice-presidents; and Dr. Chas. N. Combs, Terre Haute, secretary-treasurer. Drs. Chas. Stoltz, South Bend, and Albert E. Bulson, Jr. (re-elected), were selected as delegates to the American Medical Association for a period of two years. Indianapolis was selected as the place for the next session of the Association, which will be held on Wednesday, Thursday and Friday, September 27, 28 and 29, 1918.

The arrangements for the Evansville session were all that could be desired. All of the section and general meetings were held in the Coliseum, a building for public meetings which very justly is the pride of the Evansville people. The hotel accommodations were ample, and the medical profession and people generally of Evansville extended a cordial welcome and splendid hospitality. Great credit is due Mr. E. C. Roach, manager of the Masonic activities in Evansville, who superintended all arrangements for the Association and gave freely of his time without charge to the profession. The entertainment for the ladies was conducted creditably by Mrs. Carl Viehe, Mrs. Walter Cleveland and Mrs. Sidney Eichel.

Last, but not least, the Association went on record as pledging its unflinching support to the country in this time of need, and urged its membership to give freely of money and services in effecting a victorious end of the present war.

HELPING DOCTORS TO HELP THE PEOPLE

The good work of protecting the public from disease is spreading rapidly throughout the United States. State after state is spending more money in the work and getting correspondingly better results. The public is spared a great deal of sickness and saved a great deal of money, though in all probability the people do not realize that fact. However, the good work continues. We wish to call attention to the good work of the Indiana State Board of Health. In its endeavors to keep Indiana's citizens healthy it issues pamphlets on hygiene, care of the sick, etc., among which are:

Typhoid fever, Its Cause and Prevention, 16 pages.

Scarlet Fever, Its Sanitary Features, Direction for Its Management and Prevention, 8 pages.

Whooping Cough, 4 pages.

About Smallpox and Vaccination, 20 pages.

Diphtheria, 22 pages.

Measles, 8 pages.

Consumption, Its Cause, Prevention and Cure, 31 pages.

Hygiene vs. The Sexual Plagues, 39 pages.

Methods of Sanitary Disposal of Sewage Without Sewers, 19 pages.

The Prevention of Insanity, 8 pages.

The Care of the Baby in Hot Weather, 16 pages.

The Student's Health Creed, 1 page, to paste in school book.

The Ears, 1 page, to paste in book.

Care of Books and of the Eyes, 1 page, to paste in book.

Fly Catechism, Journal of a Female House Fly, 2 pages.

Facts About Tuberculosis, a card for patients.

Facts About Syphilis, a card for patients.

Facts About Gonorrhea, a card for patients.

Monthly bulletin of Indiana State Board of Health, 25 cents a year.

Book of Instructions to Health Authorities, 190 pages. This book is the property of the Indiana State Board of Health. It contains the statutes pertaining to the public health, the pure food and drug statutes and the rules of the State Board of Health as authorized in said statutes. The courts of Indiana have decided that the rules established by the State Board of Health have the force of statutes, and a law

authorizing their adoption is constitutional, which is a good provision when the Board of Health is composed of the right persons, as in Indiana.

The board also issues a card giving directions for the management of the sick-room.

Secretary Hurty, of the Indiana Board of Health, writes us as follows:

We supply our pamphlets free of charge upon application to all citizens of Indiana, and are glad to send them, too, outside of the state upon special request.—The Medical World, October, 1917.

CONSERVATION OF FOOD

Mr. Hoover, our food dictator, is urging the American people to conserve their food supply, and he is offering many valuable suggestions. One of his latest requests is as follows:

1. Eat one wheatless meal a day.
2. Eat beef, mutton, or pork not more than once a day.
3. Economize on the use of butter.
4. Cut the daily allowance of sugar in tea or coffee, or in other ways.
5. Eat more vegetables, fruits, and fish.
6. Urge, in the home or the restaurants frequented, the necessity of economy.

In reality these recommendations are excellent to follow in peace as well as in war times. It is well known that the average person eats about twice as much as actually required for good health, and it is equally well known that the consumption of the more expensive foods, and especially nitrogenous foods, could be greatly cut down with a corresponding benefit to health. Doctors can do more than anyone else in helping to make conservation of food effective. Every person who consults a doctor for any sort of ailment can be advised to follow a restricted diet and one that conforms largely to the recommendations made by the food dictator, and with great benefit to the patient.

It has been well said that more than half of the ill health of our people is due to indiscretions in diet and faulty habits in eating. The American habit of "bolting" the food is just as vicious in its effect upon health as the habit of eating unsparingly of any kind of food that pleases the appetite. Thorough mastication of the food is a feature of eating that receives little attention at the hands of the average American. It would not be a bad idea for doctors

in their practice of designating the amount and kind of food for patients to eat to specify the time during which it should be consumed, and explain to the patient that the reason for the time is for the purpose of insuring thorough mastication of everything that goes into the stomach.

Mr. Hoover might well enlist the cooperation of the medical profession in furthering his conservation of food recommendations, but doctors can and should help along the movement by such suggestions to patients as are in direct line with proper treatment and conservation of health.

MORE KULTUR

A dispatch from British headquarters announces that a German airman recently dropped bombs on two hospitals behind the British lines, killing three British nurses and several wounded soldiers. Recently the fiends bombed an American hospital, killing and wounding several physicians and nurses. There is no reason for surprise at such wicked warfare, but there is every reason for keeping the record straight. It does not help to point out that such crimes are in violation of the law of nations—to say nothing of the law of humanity—for neither law is respected by Germany. Every nurse and wounded soldier slaughtered is simply another proof of the glories of German kultur which Germany would impose on the world.

There are men in this country, a few even in this town, who, though born in the land, and of non-German parents, are still hoping for the triumph of that great conspiracy against the human race known as the German government. Probably they have done nothing to expose themselves to the penalties of the law, but they have certainly done enough to expose themselves to the contempt of their fellow-Americans. One American surgeon whose only offense was caring for the wounded of all nations—including Germany—was horribly mutilated by a bomb dropped by a German airman on a hospital in which he was laboring. The Iroquois never showed such savagery in their wars against the white man. The world at last knows that kultur is only a synonym for barbarity. Yet it is the murders of Nurse Cavell, Captain Fryatt, the women and children of the Lusitania, who assume to instruct the world in civilization.—Indianapolis News, October 3, 1917.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

AGAIN the time arrives for reminding the members of the Indiana State Medical Association that the dues for the year 1918 are payable on or before the first of the year, and in this connection it should be remembered that this time the dues are \$4 instead of \$2 for each member. The matter of paying the dues should not be neglected. There is no occasion for delinquents.

THE Committee of Public Safety for the Commonwealth of Pennsylvania has sent out a circular letter to the retail druggists of Pennsylvania urging care in the waste of drugs, pharmaceutical supplies and biological products, all of which have increased in price and many have become very scarce. The attention of Indiana pharmacists might well be called to this matter, for, while as a rule they are careful in handling these products, yet carelessness is apt to crop up here and there and bring about waste.

WE publish elsewhere in this issue the new rule governing the sale of milk in Indiana, passed by the state board of health, and to go into effect Jan. 1, 1918. These rules are essentially those in force in Massachusetts, New York, California and many cities; they are fair and just in consideration of health conservation and infant mortality, and are entirely in keeping with efficient and advanced work of our state board of health. Every county and city health officer in particular should be perfectly familiar with this new rule and should be unhesitating in seeing that it is obeyed, and it is the duty of every physician to report to the local board of health any violation that comes to his attention.

WOULDN'T it be a good idea for our medical colleges to improve their courses in the study of *materia medica* and therapeutics? In the average medical college the science and art of drug prescribing is given scant consideration. Likewise, the subject of medical ethics is not considered at all, or, at best, in one or two talks that do not adequately cover the subject, and our medical students are turned out with the necessity of later acquiring a knowledge that should be imparted to them during their student days.

ATTENTION of all county medical society secretaries is called to the new ruling of the postal authorities (Sections 640 and 641 of Postal Laws and Regulations) to the effect that all publications must bear full address of subscriber, including name of street and number or office building, and unless such publications are completely addressed they will be classed as un-mailable matter. Therefore, in sending in dues for the new year, which are due on or before January 1, county secretaries must give complete street address or office building number for all physicians residing in towns or cities having free delivery, or otherwise such physicians will not receive *THE JOURNAL*.

Considerable complaint arises concerning what seems to be unfair and undeserved promotions in the army, and especially among medical officers. It has been charged that through political or other "pulls" some men have been advanced over the heads of others more deserving, and that even the assignments and conditions under which the officers work have been subject to favoritism. We are not prepared to believe that such a state of affairs very generally exists, though it is well to remember that it is practically impossible to avoid a certain amount of preference being shown as a direct result of friendship or personal or political influence. It occurs in connection with every activity and must be expected as one of the things that cannot be entirely eradicated. On the whole our army, when it finally gets into actual service, will be found to be officered by men who are thoroughly qualified for the positions they occupy, and it will not take long to discover as well as to eliminate the unfit.

THROUGH Federal action, second, third and fourth year medical students have been exempted from military service. This action is justified and in keeping with a policy of conservation of resources. However, now comes

the short-sighted and autocratic action on the part of certain conscription boards that fail to recognize the edict unless they receive definite orders from Washington concerning the specific conscript affected by the act. We are informed that some of the medical students at the Medical Department of Indiana University who have received their papers from Washington stating that they have been admitted to the Medical Reserve Corps and are temporarily exempted from military service, have been ordered by the conscription boards to report for military service at some of the various military camps. Other medical students, who months ago made application for admission to the Medical Reserve Corps, and who, because of such application, and also because they are medical students, are exempt from military service even though their applications have not been acted on, are likewise ordered for military service. This, it seems to use, is carrying "red tape" to the extreme and is an injustice that is inexcusable. Official "red tape" has killed many very creditable and necessary projects, and we are accustomed to tolerate more or less of it in governmental affairs, even though entirely unnecessary, but in war times or in other dire emergencies it seems as though "red tape" should be sidetracked.

It is a pity that a man who has done so much for the practice of medicine and whose name is revered so highly as that of Dr. Abraham Jacobi should have to suffer from the effects of having his name drawn into argument for the liquor interests. In a pamphlet, bearing the picture of Dr. Jacobi, sent out by the liquor faction, this venerable physician is presented in defense of the use of alcoholics. He is quoted as saying that "prohibition is not proved desirable by the backing of 400,000 women or 600 congressmen," and as deriding the president of the American Medical Association and the House of Delegates for the action on the alcohol question at the New York session. Dr. Jacobi may be credited with the statement that alcohol is a stimulant, but it is not a question of what alcohol will do that enters into this controversy. Granting that alcohol is a stimulant, there are numerous other things that will take its place, and there is no reason why it should be "bolstered up" when it is so injurious and detrimental as a beverage. One might as well favor the indiscriminate use of morphin. Morphin is a valuable drug in the practice of medicine, but that is no reason why it should be used under any and all conditions; and while alcohol has stimulating qualities, that

is no reason why it should be advocated for indiscriminate use as a beverage or even in a medicinal way when other stimulants are equally if not more efficacious. The liquor interests, in dire extremity, are making from mole-hill statements of this sort by men of standing, mountain-sized pleas for the continuance of the manufacture of alcohol and alcoholic beverages; but the advantages of prohibition, and especially in this time of national crisis, outweigh to an overwhelming extent any advantages that are claimed by the liquor element.

SINCE our recommendation that readers of THE JOURNAL who are entering war service should find out whether their life insurance policies are affected by war service we have received some letters which indicate that the recommendation was justified. One doctor furnishes us with letters from life insurance companies indicating that his life insurance policies are null and void unless he procures, at considerable expense, a war clause. His experience is the experience of other physicians, so that it would be well for every doctor who enters military service to get his life insurance policies fixed so that they really are a protection at any and all times. It may be interesting to know that practically all of the old, well established and reliable life insurance companies, up to the time that the United States entered the war, issued policies that are without restrictions of any kind whatsoever, and of course are unaffected by military service. On the other hand, most of the smaller companies, whether writing old line life insurance or not, always have issued policies having war clauses and other restrictions which have made their policies less valuable. It seems to us that this fact affords definite and conclusive proof of the fact that it pays to get the best. It also shows the necessity of knowing exactly what one is paying for, and, in this instance, in reading the policies and understanding the provisions. The value of many life insurance policies is limited or entirely annulled by restrictions. Some of the oldest and best known of the old line companies issue policies with the following clause: "This policy is free of conditions as to residence, occupation, travel, habits of life, and manner, time or place of death. No permit or extra premium will be required for military or naval service in time of war or in time of peace." It goes without saying that any doctor who has purchased life insurance which does not possess such a clause as quoted has bought a policy which does not give him the protection he ought to have.

A NEW tax law has been passed by Congress to go into effect immediately, and, as one newspaper puts it, "nothing but the air we breathe has escaped taxation." Doctors are affected through many avenues, but especially through the heavy tax that has been placed upon the already high priced drugs and chemicals. Another feature of the tax law which will affect every physician is the income tax, for now every person having a net income over \$1,000 per year must contribute to the Government. This means that doctors must have a better system of bookkeeping than is practiced by the average doctor. It behooves the doctor to get thoroughly acquainted with the provisions of the income tax feature of the law so that he can rightfully claim exemptions when exemptions are permissible. A doctor's income may be considered as the actual amount of money, or its equivalent, received from his work during the course of the year. The income also will include any returns from investments, but as the average doctor has few investments that feature will not cause him to lie awake nights figuring up his tax. The net income will be the difference between the gross income and all actual expenses incurred in carrying on the practice of medicine. However, the exemptions do not include living expenses, house rent, or money expended for anything not directly necessary in the conduct of practice. Heretofore returns have been for the fiscal year, from January 1 to December 31, and all reports are subject to verification by revenue officers who legally are permitted to go into the private affairs of every citizen to any extent that seems necessary in order to secure complete and accurate reports for the benefit of the Government. Up to the present time federal officers have been kept tolerably busy in verifying the reports from corporations and large business houses, but they gradually are getting caught up with their work and now revenue officers are paying their respects to individuals, so that any doctor need not be surprised at any time to receive a visit from a revenue officer who may none too politely ask for an inspection of all of the books and private records of the doctor.

CONCERNING the enlistment of physicians in the Medical Reserve Corps, the War Department has sent out a letter from Dr. Joseph Colt Bloodgood, of Baltimore, which makes quite plain the necessity for the enlistment in the

Medical Reserve Corps of nearly all able-bodied physicians. The letter is as follows:

Dear Doctor:—

I acknowledge the receipt of your answer to my first communication, and I learn from it that you are not yet commissioned in the Medical Reserve Corps. In view of the large number of individuals with whom I am corresponding, the letters must be written in duplicate, so please overlook my inability to send you a personal communication, unless the contents of your letter make it essential.

Those who are not commissioned in the Medical Reserve Corps fall in the following groups:

(1) Physically unfit. There is no question as to this exemption, but the probabilities are that you are able to perform your duties in civic life, and you should try in some way to release an equally trained man who is physically fit. Perhaps you could substitute for one who is in a public health position, or one who is a teacher. It would be unusually helpful if you could form a partnership with a man of equal training, but physically fit, who is prevented from going for financial reasons, and divide your increased earnings with this man.

(2) Teachers in medical schools. The Surgeon-General feels that it is imperative not to weaken the faculties of the medical schools, but members of the teaching staffs should do all in their power to release as many as possible among their number who are physically fit and have some special training, filling their places with men of equally good training who are not teaching but who are physically unfit for service.

(3) Public health officials. All agree that the State and City Public Health Departments of this country should not be weakened. It is as important for the success of this great drive for democracy to protect the health of those at home as that of the soldiers. However, there are many opportunities for substitution here. Look for a man of equal training, but physically unfit, to temporarily take your place in the public health work. It might be possible in some cases for him to perform the duties of a public health official and to look after some general practice, or some specialty in medicine or surgery.

(4) Many well trained and young graduates in medicine have been prevented from entering the Medical Reserve Corps because of dependents or financial obligations which cannot be met by the salary of even a Major in the Medical Reserve Corps. Apparently there is only one way for such men to be released for service in the army. They must find someone with about the same training, either aged over 55, or with some physical defect, and form some partnership with him so that the increased earnings of the one who remains at home will, to a large extent, protect the one who volunteers for the Medical Reserve Corps.

I have discussed all of these questions in an article about to be published in the September number of the *Southern Medical Journal*. Please read it! In this great drive for democracy every member of the medical profession must feel his individual responsibility. He must feel that the medical profession has special obligations, not only special privileges, and do everything in his power to help the government in this great necessary undertaking.

Very sincerely yours,

JOSEPH COLT BLOODGOOD.

DEATHS

T. W. FARNSWORTH, M.D., Indianapolis, died September 14, aged 80 years.

MRS. CHARLES L. WRIGHT, wife of Dr. Charles L. Wright of Huntington, committed suicide October 4.

FLORA M. BURDELL THOMAS, Greensburg, widow of the late Dr. R. M. Thomas, died recently, aged 57 years.

MARY HCDOLL WALTERS, widow of the late Dr. Carl A. Walters of Lawrenceburg, died September 11, aged 81 years.

SAMUEL O. KNAPP, M.D., Frankfort, died September 20, following a year's illness from Bright's diseases; aged 59 years.

PREMETER MULLINIX, M.D., formerly physician at Cloverdale, died at Sioux City, Ia., recently, and the body was brought to Greencastle, Ind., for burial.

JOHN R. STARK, M.D., Indianapolis, 26 years of age, died September 30 of heart trouble. He was graduated from the Indiana University School of Medicine in 1913.

DR. FRED C. DICKSON, Danville, died September 20 at the Glen Rest Sanitarium near Columbus, Ohio, where he had been taking treatment since a nervous breakdown one year ago.

JOSEPH F. SOMES, M.D., Vincennes, died September 28, aged 53 years. Graduated from the Rush Medical College, Chicago, in 1889, and was a member of the Knox County Medical Society and the Indiana State Medical Association.

CHARLES E. TRIPLETT, M.D., died August 29, at his home in Morocco, aged nearly 83 years. Dr. Triplett graduated from the Kentucky School of Medicine in 1856, soon after which he located at Morocco where he continued to practice until a few years ago.

LORAN W. JORDAN, M.D., Wabash, an invalid for the past five years and retired from practice, died October 2. Previous to his invalidism, Dr. Jordan was a prominent eye, ear, nose and throat specialist, having been graduated from the Hahnemann Medical College in Chicago in 1883.

JOHN WESLEY STORK, M.D., died October 1 at his home in Darmstadt, Vanderburg County, following a stroke of apoplexy, aged 45 years. Dr. Stork graduated from the Kentucky School of Medicine, Louisville, in 1895. He was a member of the Vanderburg County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

INDIANAPOLIS

DR. FRED A. TUCKER of Noblesville, now stationed at Fort Harrison, has been elevated to the rank of major, and is now chief sanitary officer at the post.

THE war has made considerable inroads into the charity work done by Indianapolis physicians. The Marion County Society has been asked to provide a doctor for the Colored Orphan's Home, and this work has been undertaken by Dr. R. R. Coble.

DR. AUGUSTUS L. MARSHALL is the new secretary of the Indianapolis Medical Society succeeding Dr. Leslie H. Maxwell now connected with Lilly Hospital unit No. 32. Dr. Marshall was also a delegate from Marion County and is a member of the Committee on Legislation.

THE enrollment at the Indiana University School of Medicine has increased in spite of the war, this year's classes totalling 134 students as compared with 109 last year. The classes are divided as follows: 57 sophmores, 33 juniors, 37 seniors, 6 social service students and one special student. There also are 67 freshman medical students enrolled at Bloomington. A great deal of confusion exists at present in the Medical School due to the fact that a number of students have been included in the draft and, through inability to obtain action at Washington on applications for exemption, have faced the necessity of entraining for Camp Taylor at Louisville. A number of local boards allowed conscripts called in the first quota to delay their departure pending word from Washington, but most of them were not granted an extension of time beyond the date set for the second quota

to move into camp. It is likely, therefore, that a number of students will have their college work interrupted by being forced to enter the camp at Louisville, Kentucky, and remain there until official action is taken in their cases.

GENERAL

DR. W. D. CALVIN of Fort Wayne left the middle of September for duty at Houston, Tex.

SOUTH BEND has been having a typhoid fever epidemic with a record of fifty cases in fifteen days.

DR. A. E. STINSON of Athens was quite seriously injured when knocked down by an automobile on September 2.

DR. IRVIN HUCKLEBERRY has located at Salem for the practice of medicine and is to be associated with Dr. J. I. Mitchell.

DR. ROBERT MILTON RECOBS of Tipton has received his appointment as captain in the Medical Officers Reserve Corps.

LIEUT. KARL C. EBERLY of Fort Wayne has been appointed director of the post hospital at Fort Benjamin Harrison.

DR. LEE F. HUNT of Anderson has been promoted to the rank of captain and transferred to Fort Ayre, near Boston, Mass.

DR. and MRS. THOMAS B. NOBLE of Indianapolis left September 15 for a visit in New York City and other eastern points.

LIEUT. G. D. SCOTT of Sullivan has been appointed senior surgeon at the military hospital at Camp Custer, Battle Creek, Michigan.

DR. and MRS. C. E. STEPHENSON and daughter of Indianapolis spent the latter part of September in New York and Pittsburgh.

DR. RODNEY E. TROUTMAN of Logansport has been promoted from a lieutenantancy in the Medical Officers Reserve Corps to the rank of captain.

DR. JOHN A. LEAS, formerly of Indianapolis, is in the United States medical service somewhere in France according to recent messages received.

THE Second Councilor District Medical Association held its annual meeting at Spencer on September 4, with more than fifty doctors in attendance.

DR. D. F. RANDOLPH of Waldron was painfully injured in an automobile accident early in September. Mrs. Randolph also sustained a broken arm.

DR. JOSEPH E. MORROW of Indianapolis left the latter part of September for New York, where he expects to spend three months in special work.

DR. W. A. BAILEY of Carlisle underwent an operation at the Good Samaritan Hospital, Vincennes, early in September, making an uneventful recovery.

DR. WILL C. MOORE of Indianapolis, recently returned from Red Cross service in Europe, was married August 20 to Miss Edith Pfaffenberger of Indianapolis.

THE War Council of the Red Cross has voted an appropriation of \$500,000 for the establishment of a hospital supply service under the Red Cross Commission in France.

DR. J. J. STANTON of Logansport, who served with Ambulance Company No. 1 on the Mexican border, has received his commission as captain in the United States Army.

MORE than one thousand military and civilian surgeons expect to be in attendance at the Association of Military Surgeons held at Fort Benjamin Harrison, October 8 to 10.

BECAUSE of the diphtheria epidemic prevailing in Indianapolis, Drs. J. J. Briggs and J. N. Stark have been added to the eight public school medical officers recently appointed.

CITIZENS of Lake County have inaugurated a county wide campaign for a tuberculosis hospital. The work is under the direction of the Lake County Tuberculosis Society.

DR. and MRS. CHAS. PFAFFLIN and daughter of Indianapolis spent the latter part of August and the first two weeks in September at their summer home at Walloon Lake, Minn.

DR. L. P. DRAYER has been appointed secretary of the Fort Wayne City Board of Health, serving in the place of Capt. John H. Gilpin, who is now located at Fort Benjamin Harrison.

DR. HERBERT M. SENSENY of Fort Wayne was married September 15 to Miss Olive B. Nequette of Milwaukee, Wis. After a trip to New York City they returned to Fort Wayne.

It is reported that Harvard Medical School, as a war measure, will open its doors to a limited number of women students, but they will not receive or be eligible to receive the university degree.

CAPT. M. H. THOMAS of Huntington, who left in August for foreign service, has arrived safely on European soil according to a cablegram received by his mother, Mrs. A. M. Thomas.

DR. JAMES H. WALKER, associate superintendent of the Indiana Reformatory at Jeffersonville, has been granted an indefinite leave of absence for service in the Medical Corps of the U. S. Army.

THE monthly meeting of the Laporte County Medical Society was held September 14, and had for its special guest Dr. May Michael of Chicago, who spoke on the Study of Tuberculosis in Infants.

PHYSICIANS of the Washington and Crawford county medical societies, together with their families, enjoyed a delightful picnic on the banks of Blue river at Rogers Camp near Milltown on September 5.

CAPT. GEORGE W. NEWELL of Peru, now located at Fort Riley, Kansas, has resigned as coroner of Miami County, and Dr. W. H. Wagoner, acting deputy coroner, has been appointed to fill the place.

DR. JAMES A. RAWLEY of Brazil, who has been taking post-graduate work in the New York Polyclinic School, has returned home. He spent several days in Philadelphia and Washington, D. C., enroute home.

AN appropriation of \$350,000 has been made by the Nebraska legislature for the College of Medicine of the University of Nebraska for the next biennium. This makes possible the erection of a new laboratory building.

MAJOR JOHN W. SLUSS of Indianapolis, for many years connected with the medical branch of the Indiana National Guard, has been appointed chief of the surgical division of the base hospital at Camp Grant, Rockford, Illinois.

DR. ROBERT W. WOOD, professor of physics at Johns Hopkins University and inventor of the French lachrymose gas, has arrived in France safely, according to cablegram, and is working with the French Academy of Scientists.

DR. J. A. STRONG of the Medical Officers Reserve Corps spent several days at his home in Columbia City the latter part of September before leaving for the Rockefeller Institute, New York, preparatory to his departure for France.

DR. A. F. KNOEFEL, of Terre Haute, is one of a committee of five surgeons who have prepared, under the direction of the Department of the Interior Bureau of Mines, a book on Advanced First-Aid Instructions for Miners.

DR. W. D. ASBURY, formerly of Jasonville, has located at Terre Haute for the practice of his profession. Dr. H. H. Ward of Coalmont purchased the office fixtures, practice and residence of Dr. Asbury and will remove to Jasonville.

DR. W. A. BELL, formerly of Tipton but serving in the Medical Department of the Army for some time, was married on August 28 to Mrs. Iva Russell of Tipton. Dr. Bell left the first of September for service "somewhere in France."

DR. G. G. VAN MATER of Peru, who has been at Fort Benjamin Harrison for some months, has been ordered to Fort Dix, Wrightstown, N. J., for duty; and Dr. O. R. Lynch, also of Peru, has been ordered to Fort Grant, Rockford, Ill.

THE eighth annual meeting of the American Association for Study and Prevention of Infant Mortality will be held at Richmond, Virginia, October 15 to 17, and the program has been arranged to cover problems incident to war conditions.

MEMBERS of the Indiana State Medical Association attending the Evansville session were delighted to greet Dr. Edwin Walker again. Dr. Walker is recovering from a serious illness and expects to resume his professional work at an early date.

MEMBERS of the Second Company, medical officers' training camp at Fort Benjamin Harrison, tendered a banquet at the Hotel Severin, Indianapolis, on September 15, in honor of Major George Baehr of New York, an instructor at the camp.

DR. WILLIAM BROWN DOHERTY of Louisville, Kentucky, has been appointed ophthalmic surgeon at Fort Benjamin Harrison. He takes up his work at Fort Benjamin Harrison following several weeks training in the Army Medical School at Washington.

MISS MARY B. AUSTIN of Battle Creek has been procured as superintendent of the new Columbus Hospital to take the place of Miss Eleanor Ryan who resigned to join the nurses of the Base Hospital No. 32 who left recently for training in New York City.

ST. JOSEPH HOSPITAL, South Bend, are planning for the erection of an addition to their present quarters. The new building will cost from \$70,000 to \$90,000, and will be three stories high and have a depth of 41½ feet.

RED CROSS Ambulance Company No. 18, under command of Capt. Mason B. Light, and composed of 119 young men of Indianapolis and Broad Ripple, departed September 16 for Camp Grant at Rockford, Ill., where they will receive intensive training for service in France.

A FUND of \$500,000 has been established by the American College of Surgeons for the purpose of conducting a ten-year investigation of the hospitals of this country; and a national board of physicians and surgeons has been appointed to carry on this work of standardization.

THE September number of *Medicine and Surgery*, under the editorship of Dr. Philip Skrainka, St. Louis, is devoted to a comprehensive study of occupational diseases which is unusually interesting and enlightening, and shows a great amount of work and study in its presentation.

PHYSICIANS of Indiana who served on draft examination boards received words of commendation from state conscription officer, Jesse Eschbach, because of the fact that reports show less than 2 per cent. of the soldiers now at Louisville have failed to pass the tests of army doctors.

DRS. T. B. TEMPLIN and G. S. GREENE, for several years practicing physicians at Gary, have united their interests and hereafter will practice under the firm name of Templin & Greene. Dr. J. E. Metcalf, who formerly was associated with Dr. Templin, is serving in the U. S. Army with the commission of captain.

A COMPILATION of vital statistics dealing with Hoosiers is being undertaken by the state board of health on a much larger scale than ever before attempted. H. M. Wright, formerly of Bowling Green, Ky., vital statistician for the Kentucky State Board of Health, has been obtained to take charge of the work.

THE Association of Military Dental Surgeons of the United States is making an effort to secure as members every dental surgeon and ex-dental surgeon of the Army and Navy and National Guard, and to secure legislation which will place the Dental Corps on an equal plane as that of the Medical Corps.

THE annual meeting of the Second District Medical Society was held in Spencer the middle of September. The following officers were elected for the coming year: President, Dr. C. E. Harris, Bloomington; vice-president, Dr. W. N. Culmer, Bloomington, and secretary-treasurer, Dr. C. C. Stroup, Bloomington.

THE *Indianapolis Star* has been conducting a campaign to raise a fund of \$2,000 for the purchase of an ambulance to be known as the James Whitcomb Riley Ambulance and presented to the general committee of the American Poets' Ambulance of Italy on the anniversary of the birth of the hoosier poet.

MAJOR EDMUND D. CLARK, and CAPT. CHARLES D. HUMES of Base Hospital No. 32 have been ordered to Philadelphia for some special training in military surgery, and will join the remainder of the unit in New York City on its way to France. Major Orange G. Pfaff is in command during the absence of Major Clark.

LIEUT. WILLIAM T. FITZSIMMONS, Kansas City, Mo., adjutant of the Harvard base hospital unit, was killed by a bomb dropped on the hospital on the coast of France by German airmen, September 9. The report of the death of Lieutenant Fitzsimmons shows that the first man in khaki to die for democracy was a physician.

THE cornerstone of the new Wells County Hospital, at Bluffton, was laid September 4, with impressive ceremonies and witnessed by more than 1,500 people. Resolutions passed by the Wells County Medical Society, bearing its official seal, and signed by the entire membership of the society, were placed in the cornerstone.

SUNNYSIDE, Marion County's tuberculosis hospital, in charge of Dr. Harold Hatch, superintendent, was opened on September 15, and four patients accepted on that day. The hospital occupies an elevated woodland, one mile west of the town of Oaklandon, and the institution is considered a model by tuberculosis experts who have observed the architectural plan.

DRS. JAMES M. STODDARD and THOMAS M. HONES of Anderson, and L. F. MOBLEY of Summitville have received their commissions for service in Hospital Unit I which is being organized by Major J. B. Fattic of Anderson. Other doctors of the unit are L. F. Hunt, W. M. Miley and J. R. Tracey of Anderson, and Dr. Bock of Muncie. The unit still lacks a number of nurses to complete its organization.

THE Thirteenth District Medical Society met at Rochester on September 14, and were addressed by Dr. Joseph Rilus Eastman of Indianapolis, on the subject "The Doctor and the War." Officers for the ensuing year were elected as follows: President, J. C. Fleming, Elkhart; vice-president, S. C. Loring, Plymouth; secretary-treasurer, C. Norman Howard, Warsaw; counselor, H. M. Miller, South Bend.

DURING the month of August the state board of health announces that there were 336 cases of typhoid fever in 67 counties of Indiana, with 63 deaths from the disease. Tuberculosis took 304 persons; pneumonia, 69 persons; diphtheria, 19 persons out of 207 cases in 33 counties, and infantile paralysis, 1 person out of 17 cases, mostly in Lake County. The total deaths for the month numbered 2,989, and births 5,479.

THE fact that the death rate from automobile accidents has more than tripled since 1911 is disclosed by a study of the deaths among the industrial policy-holders of one of our insurance companies. In 1911 the death rate from this cause was 2.3 per 100,000; in 1916 it had increased to 7.4. During this period the rate for each year was markedly higher than the rate for the year before, and that for 1916 showed an increase of more than 37 per cent. over the figures for 1915. Nearly one-third of those killed are children under ten years of age. The mortality from automobiles far outnumber deaths caused by surface cars, subway trains, elevated trains, bicycles and horse-drawn vehicles combined.

PLANS are being considered for the erection of a \$500,000 children's hospital at Indianapolis immediately after the war. The hospital will be christened the James Whitcomb Riley Memorial Hospital, in memory of the well beloved hoosier poet, and its chief purpose will be to establish a training school for nurses to specialize on the diseases of children, to educate mothers in the proper care of children and how to prevent disease. The hospital will be open for the treatment of children from all parts of the state, and the aid of people from all over Indiana will be sought in an endeavor to establish an endowment fund of at least \$2,000,000.

A BILL, endorsed by the President and Secretary McAdoo, passed by the House of Representatives and pending in the Senate, provides separation allowance to families of men in active service, and would revise the scale of compensation to disabled men and their families and to the widows and children of men killed in service. It also contemplates the organization of an effective system of reeducation under government direction based on the experience of Canada and of Europe, and a provision, suggested by the Canadian municipal insurance, whereby the government would sell life insurance at rates based on the cost of insurance in time of peace.

SIXTY-FIVE nurses belonging to base hospital No. 32 of Indianapolis left September 9 for New York City for special training for service in the war against Germany. On their departure the City Hospital Alumni Association presented them with an American flag. Miss Florence Martin, formerly superintendent of nurses at the City Hospital is in charge as chief nurse, and the entire nursing personnel consists of eleven nurses from St. Vincent's Hospital, twelve from the City Hospital, fourteen from the Methodist Hospital, four from the Deaconess Hospital, two from the Robert W. Long Hospital, one from the Fletcher Sanitarium and the balance from private practice. The group represented more than twenty training schools. The physicians and enlisted men for the base hospital are in training at Fort Benjamin Harrison, and just when orders for foreign service will come is not known.

DURING August the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Calco Chemical Company: Betanaphthol Benzoate-Calco.

The Diarsenol Company Limited: Neodiarsenol Ampoules, 0.15, 0.3, 0.45, 0.6, 0.75 and 0.9 gm.

Fairchild Bros. and Foster: Gastron.

Hoffmann-LaRoche Chemical Works: Tyramine-Roche.

Maltbie Chemical Company: Calcreose, Calcreose Solution, Calcreose Tablets, 4 grains.

DURING September the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

The Abbott Laboratories, Chlorinated Eucalyptol-Dakin, Chlorinated Paraffin Oil-Dakin, Dichloramine-T, Abbott, Halazone-Abbott, Halazone Tablets-Abbott.

General Laboratories: Hyclorite.

Schering and Glatz: Camiofen Ointment.

MAJOR-GENERAL GORGAS, surgeon-general of the United States Army, has announced the sites chosen for the location of the great "reconstruction" hospitals in which the United States will begin the work of rehabilitating for private life its soldiers who return wounded from the front in Europe. They include nineteen cities, as follows: Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Cincinnati, Chicago, St. Paul, Seattle, San Francisco, Los Angeles, Denver, Kansas City, St. Louis, Memphis, Richmond, Atlanta and New Orleans. The hospitals at Boston, New York, Washington and Chicago probably will be the first built, and they will have 500 beds with provision for doubling their capacity if necessary.

THE Mayo Foundation, Rochester, Minn. has been made the absolute property of the University of Minnesota after having been affiliated with the University for a trial period of two years. The Board of Regents of the University unanimously ratified the permanent agreement by which the Foundation is to be used perpetually for higher medical education, research and investigation. Securities totaling \$1,650,345, representing the fortunes of Dr. William J. Mayo and Dr. Charles H. Mayo, were turned over by them to the university regents as an outright gift. The expenses of the foundation will be paid for by the physicians until a fund of \$2,000,000 has accumulated and thereafter, the regents explained, the income from the fund will maintain it.—*New York Medical Journal*.

THE United States Food Administration announces the creation of an Advisory Committee on Alimentation, the purpose of which is to gain the active cooperation of experts in the determination of policies of food control from the standpoint of the science of nutrition. The Committee consists of C. L. Aslberg, Russell H. Chittenden, C. F. Langworthy, Graham Lusk, LaFayette B. Mendel, and E. V. McCullum. Another Committee, Advisory Committee on Public Health, composed of William H. Welch, Leonard P. Ayer, Herman Biggs, David T. Edsall, Cary T. Grayson, A. Walter Hewlett, T. T. Janeway, F. G. Novy, Richard M. Pearce, and H. Gideon Wells, has been created because the Food Administration, realizing that the nutrition of a people and the condition of its food supply bear intimate relations to the general problems of public health, sought the advice of experts in these lines.

ELI LILLY & COMPANY, of Indianapolis, probably are the largest manufacturers of atropine in the United States. Prior to the war no atropine was manufactured in this country, practically all of it being imported from Germany, but in 1912 Eli Lilly & Company began conducting experiments in the culture of belladonna, and in 1915 put out the first atropine manufactured in the United States. However, in view of the fact that the belladonna plant required very careful cultivation, and a two years' growth to produce a mature crop, this firm continued their experiments, working along the well-known fact that stramonium, commonly known as Jimson weed which grows abundantly along the roadside and around barn lots all over Indiana, contains hyoscyamine, an alkaloid closely related to and convertible into atropine. Having in its possession the Lloyd process for separating alkaloids, which consists of the absorption of alkaloids from aqueous solutions by the use of a form of hydrated aluminum silicate, Eli Lilly & Company found it practicable to utilize Jimson weed as a source of atropine, and in 1916 purchased 1,600,000 pounds of the green herb, nearly all of which was collected from Marion and surrounding counties. This year the manufacture is conducted on an even larger scale. In addition, the firm has continued the cultivation of belladonna, and has been conducting experiments with the object of improving the alkaloidal yield. This is accomplished by selection and hybridization along the lines followed by horticulturalists, and the results have been very promising.

IN the course of an investigation carried on in New York City by Dr. Haven Emerson, commissioner of health of the City of New York, as to the origin of certain lots of fraudulent neosalvarsan which had appeared on the market, not only the source of the fake medicine was discovered, but an interesting "diploma factory" was unearthed. The "diplomas" were issued for the moderate sum of \$1,500, and named the purchaser as a graduate of the Southern College of Medicine at Atlanta, and was accompanied by other "credentials." The diploma factory was conducted as a side line by a group of men manufacturing and selling imitations of neosalvarsan. Investigation disclosed that the fake neosalvarsan could be detected by the fact that some of the bogus medicine was put up in tin containers painted with aluminum to imitate the aluminum containers used for the genuine article. Some aluminum containers were used, but in these the fraudulent character of the product could be easily determined by comparing the circular with the circular accompanying the genuine article. The fraudulent circular measured $8\frac{1}{2}$ by $5\frac{1}{2}$ inches, which is about one-eighth of an inch wider and three-eighths of an inch longer than the circular with the genuine product. The word "toxicity," which appears in the fourth line from the bottom of the first page of the genuine circular, is misspelled "toxit" in the fraudulent circular, while the division of the words in the lines differs, the first word in the third line of the genuine circular being "autooxidation," while in the fraudulent circular the third line begins "oxidation." A similar discrepancy is found in the last paragraph of the descriptive circular. The first word in each line of this paragraph on the genuine circular is: Line 2, "utmost"; 3, "products"; 4, "fore"; 5, "the"; 6, "as." In the fraudulent circular these lines begin with the following words: Line 2, "care"; 3, "high"; 4, "varsan"; 5, "celency"; 6, "unimpeachable."

THE state board of health has passed some new rules making compulsory the pasteurization of all milk which is sold to households. The rules already require cleanliness of stables, cleanliness of animals and cleanliness of handling all milk. The state board of health last spring foresaw the coming milk scarcity and passed the above rules effective Jan. 1, 1918. The rules adopted are essentially those in force in Massachusetts, New York, California and in many cities. They are fair and just. Some dairymen have stood against pasteurization as

being impractical and because it would work a hardship on small dairies. If pasteurization is necessary for the preservation of the child health and child life, then, of course, it cannot possibly work a hardship on dairymen. The rules are as follows:

Rules of the State Board of Health for Preventing the Sale of Impure and Unwholesome Milk and for Grading Milk adopted in accordance with Section Seven, Chapter 104, Acts 1907, and Promulgated Under the Authority given the State Board of Health to establish such rules, as may be necessary for the Protection of the Public Health.

Passed April 13, 1917.

All milk sold or offered for sale shall be graded and labeled, as elsewhere provided, into three grades, which grades shall conform to the following specifications and requirements, to wit:

GRADE A

Raw Milk.—Milk of this class shall come from cows free from disease as determined by tuberculin tests and physical examinations by a qualified veterinarian, and shall be produced and handled by employees free from disease as determined by medical inspection of a qualified physician, under sanitary conditions, such that the bacterial count shall not exceed 10,000 per cubic centimeter at the time of delivery to the consumer. It is recommended that dairies from which this supply is obtained shall score at least 80 on the United States Bureau of Animal Industry score card.

Pasteurized Milk.—Milk of this class shall come from cows free from disease as determined by physical examinations by a qualified veterinarian, and shall be produced and handled under sanitary conditions, such that the bacteria count at no time exceeds 200,000 per cubic centimeter. All milk of this class shall be pasteurized under official supervision, and the bacteria count shall not exceed 10,000 per cubic centimeter at the time of delivery to the consumer. It is recommended that dairies from which this supply is obtained shall score at least 65 on the United States Bureau of Animal Industry score card.

GRADE B

Milk of this class shall come from cows free from disease, as determined by physical examination, of which one each year shall be by a qualified veterinarian, and shall be produced and handled under sanitary conditions, such that the bacteria count at no time exceeds 1,000,000 per cubic centimeter. All milk of this class shall be pasteurized under official supervision and the bacterial count shall not exceed 50,000 per cubic centimeter when delivered to the consumer.

Milk dealers shall be required to have a permit or license to sell any grade or class of milk and to use a label for such grade or class. Such permit or license shall be granted only after the local health department has determined that the milk of the dealer actually belongs to the grade, and it shall be revoked and the use of the label forbidden when it is determined that the milk is not in the grade or class designated.

All milk shall be labeled and marked with the grade in which it is to be sold. Besides the letter of the grade, that is, "Grade A," "Grade B," "Grade C" and the words "raw" or "pasteurized," the label shall also show the name of the producer or distributor.

Milk not suitable for human consumption may be sold for industrial purposes, provided it be heated to a higher temperature than necessary for pasteurization, and delivered in a distinctive container plainly marked with the words: "Not suitable for human

consumption" in letters not less than one-fourth inch in length and one-twelfth inch stroke.

The tuberculin test required in the case of cows producing "Grade A" milk shall be administered only by qualified veterinarians who have been authorized to make the test by the state veterinarian.

Health officers are hereby instructed to adopt such methods of inspection and regulation as may be necessary to carry out the provisions of these rules.

These rules shall be in force on and after Jan. 1, 1918.

GRADE C

Milk of this class shall come from cows free from disease as determined by physical examinations, and shall include all milk that is produced under conditions such that bacteria count is in excess of 1,000,000 per cubic centimeter.

All milk of this class shall be pasteurized, or heated to a higher temperature, and shall contain less than 50,000 bacteria per cubic centimeter when delivered to the consumer.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Evansville Session, 1917

GENERAL MEETING

THURSDAY MORNING, SEPTEMBER 27

Called to order by the Secretary of the Association, Dr. Charles N. Combs, in the absence of the President, Dr. John H. Oliver, and of the three Vice Presidents.

Dr. G. W. H. Kemper of Muncie was elected presiding officer, and in the absence of the mayor of Evansville, Dr. Carl Viehe made the address of welcome.

Dr. David Ross of Indianapolis read the address of the President.

Dr. Frank W. Foxworthy of Indianapolis invited the members to attend the meeting of the National Association of Military Surgeons to be held at Fort Benjamin Harrison, October 8, 9 and 10.

PAPERS

SYMPOSIUM ON DISEASES OF THE GALLBLADDER

Diagnosis: Dr. A. C. Kimberlin, Indianapolis.

Medical Treatment: Dr. Charles R. Sowders, Indianapolis.

(In the absence of Dr. Sowders this paper was read by the Secretary.)

Surgery of the Gallbladder: a Review: Dr. H. H. Martin, Laporte.

Cholecystectomy vs. Cholecystotomy: Dr. H. A. Duemling, Fort Wayne.

This symposium was discussed by Drs. Thomas B. Noble, Indianapolis; Charles Stolls, South Bend; J. Rilus Eastman, Indianapolis; Herbert D. Fair, Muncie; Maurice Rosenthal, Fort Wayne; H. O. Pantzer, Indianapolis; L. F. Schmauss, Alexandria; E. O. Daniels, Marion; A. S. Jaeger, Indianapolis, and by Drs. Kimberlin, Martin and Duemling in closing.

Moved by Dr. A. C. Kimberlin that the chairman of this General Meeting be authorized to appoint a committee of three to wait on the House of Delegates and recommend that provisions be made that members of the State Dental Association may become

associate members of the Indiana State Medical Association.

Motion seconded by Dr. A. E. Sterne and unanimously carried.

The chair appointed as this committee: Drs. W. N. Wishard, Indianapolis; George T. McCoy, Columbus, and L. P. Drayer, Fort Wayne.

Adjournment.

SECTION ON SURGERY

THURSDAY, SEPTEMBER 27

Owing to the lateness of the hour when the General Meeting adjourned, it was moved by the chairman, Dr. Charles Stoltz, that the Section on Surgery postpone the meeting scheduled for 11 o'clock until 2 p. m. Seconded and carried.

THURSDAY 2 P. M.

The meeting was called to order by the chairman, Dr. Charles Stoltz, of South Bend.

Dr. H. G. Hamer of Indianapolis read a paper by Dr. W. N. Wishard and himself entitled "Prostatic Hypertrophy."

Dr. Herbert D. Fair of Muncie read a paper by Dr. Charles M. Mix of Muncie entitled "Hypertrophy of the Prostate Gland."

These papers were discussed by Drs. W. N. Wishard of Indianapolis; Louis Frank and C. W. Dowden of Louisville; Maurice Rosenthal of Fort Wayne; P. E. McGowan, Bernhard Erdman and H. K. Bonn of Indianapolis; L. F. Schmauss of Alexandria, and the discussion was closed by Dr. Hamer.

Dr. Murray N. Hadley of Indianapolis read a paper by Dr. J. A. Work, Jr., of Elkhart entitled "Backache in Women."

This paper was discussed by Drs. H. O. Pantzer of Indianapolis, George McCoy of Columbus; Charles Stoltz of South Bend, and the discussion was closed by Dr. Hadley.

Dr. C. F. Kuhn of Elkhart read a paper entitled "The Surgical Treatment of Uterine Displacements."

This paper was discussed by Drs. L. F. Schmauss of Alexandria; Everett E. Padgett of Indianapolis; A. M. Hayden of Evansville; Charles Marvel of Richmond; Maurice Rosenthal of Fort Wayne, and the discussion was closed by Dr. Kuhn.

Dr. W. D. Gatch of Indianapolis read a paper entitled "Some Observations on the Surgery of the Thyroid Gland."

This paper was discussed by Dr. Goethe Link of Indianapolis, and the discussion closed by Dr. Gatch.

Dr. Joseph Rilus Eastman of Indianapolis read a paper entitled "Treatment of Abdominal Wounds in War."

This paper was discussed by Drs. Murray N. Hadley and W. D. Gatch of Indianapolis; S. C. Lang of Rock-Port, and the discussion closed by Dr. Eastman.

FRIDAY, 9 A. M.

The meeting was called to order by the chairman, Dr. Charles Stoltz.

Election of officers for the Section on Surgery for the coming year resulted as follows: chairman, Dr. Ludson Worsham of Evansville; vice chairman, Dr. Goethe Link of Indianapolis; secretary, Dr. H. O. Shafer of Rochester.

Dr. Goethe Link of Indianapolis read a paper entitled "Appendicitis, a Surgical Disease."

This paper was discussed by Drs. H. K. Bonn and J. H. Eberwein of Indianapolis; H. O. Shafer of Rochester; Ludson Worsham and Dalton Wilson of Evansville; L. F. Schmauss of Alexandria; Charles Stoltz of South Bend, and the discussion closed by Dr. Link.

Dr. H. K. Bonn of Indianapolis read a paper entitled "Coagulen (Kocher-Fonio)."

This paper was discussed by Drs. J. H. Eberwein of Indianapolis; L. F. Schmauss of Alexandria, and the discussion closed by Dr. Bonn.

Dr. J. H. Eberwein of Indianapolis read a paper by Dr. John W. Sluss of Indianapolis entitled "Tuberculosis of the Cecum."

This paper was discussed by Drs. Charles Stoltz of South Bend; H. O. Shafer of Rochester; G. W. Varner of Evansville; L. F. Schmauss of Alexandria, and the discussion closed by Dr. Eberwein.

Meeting adjourned.

SECTION ON MEDICINE

THURSDAY, SEPTEMBER 27

Called to order at 1:30 p. m., by the chairman, Dr. H. H. Miller, South Bend.

Dr. Karl Ruddell, Indianapolis, read a paper written by himself and Dr. Scott Edwards, Indianapolis, on "Some Observations in the Causes of Postoperative Nephritis." Discussed by Dr. H. R. Alburger, Indianapolis.

Dr. C. E. Sellers, Hartford City, read a paper on "Infections of the Urinary Tract in Infants and Children Due to Bacillus Coli Communis." Discussed by Dr. L. P. Drayer, Fort Wayne, and discussion closed by Dr. Sellers.

Dr. W. H. Foreman, Indianapolis, read a paper on "Chronic Constipation, Etiology, Types and Treatment," with lantern slide demonstration by Dr. Walter Pennington of Indianapolis. Discussed by Drs. H. H. Wheeler, J. Rilus Eastman, F. W. Foxworthy, J. H. Hurty, and Jane Ketcham of Indianapolis, and Dr. J. G. Jones of Vincennes; discussion closed by Dr. Foreman.

Dr. J. G. Jones, Vincennes, read a paper on "Headache as a Symptom." Discussed by Dr. C. F. Neu, and discussion closed by Dr. Jones.

Dr. H. K. Langdon, Indianapolis, read a paper, "What Do You Know About Syphilis?" Discussed by Drs. J. G. Jones, Vincennes; L. P. Drayer, Fort Wayne; A. E. Sterne, Indianapolis; B. Erdman, Indianapolis; H. R. Alburger, Indianapolis; E. E. Evans, Gary; P. T. Grant, Marengo, and closed by Dr. Langdon.

Dr. W. A. Geckler, Terre Haute, read a paper on "Phthisiogenesis and Its Relation to the Present Classification of Tuberculosis." Discussed by Dr. Alfred Henry, Indianapolis. Closed by Dr. Geckler.

Dr. W. D. Hoskins, Indianapolis, read a paper on "Tuberculosis in Children." Discussed by Dr. T. J. Beasley, Indianapolis.

Adjournment.

FRIDAY, 9 A. M.

Called to order by the chairman, Dr. H. H. Miller.

Dr. Frank E. Abbott, Indianapolis, read a paper on "A Plea for More Conservative Obstetrics."

Dr. Fred R. Clapp, South Bend, read a paper on

"Birth Injuries." These two papers were discussed by Dr. Jane Ketcham, Indianapolis, and discussion closed by Dr. Abbett and Dr. Clapp.

At this time the following officers were elected for the coming year:

Chairman, Charles P. Emerson, Indianapolis.

Secretary, Jane Ketcham, Indianapolis.

Dr. George S. Bond, Indianapolis, read a paper on "The Clinical Significance of Cardiac Symptoms and Signs." Discussed by Drs. F. B. Wynn, Indianapolis; C. E. Sellers, Hartford City; closed by Dr. Bond.

The paper of Dr. C. E. Cottingham, Indianapolis, on "Occupational Neuroses of a New Type, with Report of Cases," was read by title, Dr. Cottingham being absent on military duty.

Final adjournment.

SECTION ON EYE, EAR, NOSE AND THROAT

THURSDAY MORNING MEETING

In the absence of the chairman, Dr. Lafayette Page of Indianapolis, the Section was called to order by the vice chairman, Dr. J. R. Newcomb of Indianapolis.

The chairman's address was omitted.

Dr. J. W. Iddings, Lowell, read a paper on "Complications and End Results of Tonsillectomy and Adenectomy." Discussed by Drs. G. W. Spohn, Elkhart; M. Ravidin, Evansville; George F. Keiper, Lafayette; J. D. Heitger, Bedford, and W. A. Hollis, Hartford City, and by Dr. Iddings in closing.

Adjournment.

THURSDAY AFTERNOON MEETING

Called to order by the vice chairman at 2:30.

Dr. George F. Keiper, Lafayette, read a paper on "The Tests Used to Detect Malingering." Discussed by Drs. E. M. Shanklin, Hammond; W. F. Hughes, Indianapolis; S. A. Shoemaker, Bluffton; J. D. Heitger, Bedford; W. A. Hollis, Hartford City; L. D. Brose, Evansville; M. Ravidin, Evansville, and by Dr. Keiper in closing.

Dr. J. D. Heitger read a paper on "The Application and Interpretation of the Newer Ear Tests." Discussed by Drs. W. S. Tomlin, Indianapolis; J. H. Bridenbaugh, Columbus, and by Dr. Heitger in closing.

Dr. W. A. Hollis, Hartford City, read a paper on "Epidemic Infection of the Nose and Throat." Discussed by Drs. J. H. Bridenbaugh, Columbus; G. W. Spohn, Elkhart; J. D. Heitger, Bedford, and by Dr. Hollis in closing.

A committee consisting of Drs. W. A. Tomlin, Indianapolis, Albert E. Bulson, Jr., Fort Wayne, and W. A. Hollis, Hartford City was appointed to consider the advisability of holding a mid-winter meeting of the Section.

Adjournment.

FRIDAY MORNING MEETING

Called to order by the vice chairman at 10:30.

The election of officers resulted as follows: Chairman, Dr. J. R. Newcomb, Indianapolis; Secretary, Dr. E. M. Shanklin, Hammond.

The committee (consisting of Drs. W. A. Tomlin, W. A. Hollis and A. E. Bulson, Jr.) appointed to decide on the advisability of holding a midwinter meet-

ing of the Eye, Ear, Nose and Throat Section, reported favorably, recommending that such an organization be considered as an auxiliary of this section; that the officers of this section be the officers of the auxiliary organization; that membership in this section shall also include membership in the auxiliary organization, but that the auxiliary organization shall in no way interfere with the work of nor lessen the interest in this section.

This report was accepted by consent, with the understanding that a meeting of the auxiliary organization will be called some time this winter.

Dr. Bernard J. Larkin, Indianapolis, read a paper on "A Survey of the Trachoma Situation in Indianapolis." Discussed by Drs. J. R. Newcomb, Indianapolis; J. D. Heitger, Bedford; S. A. Shoemaker, Bluffton; E. M. Shanklin, Hammond; W. A. Hollis, Hartford City; H. C. Knapp, Huntingburg, and by Dr. Larkin in closing.

The following papers were read by title:

"Ocular Tuberculosis," Dr. L. D. Brose, Evansville.

"Focal Infection as an Etiologic Factor in Ophthalmic Inflammations," Dr. E. E. Holland, Richmond.

"Ocular Diseases Due to Foci of Infection Adjacent to or Remote from the Eye," Dr. S. A. Shoemaker, Bluffton.

Adjournment.

HOUSE OF DELEGATES

FIRST MEETING

The first regular meeting of the House of Delegates convened at 7:30 p. m., Sept. 26, 1917, at the Coliseum. President John H. Oliver being absent on account of illness, First Vice President John W. Phares presided.

Roll call was responded to by sufficient delegates to constitute a quorum. The reading of the minutes of the last meeting was dispensed with and made a matter of record as printed in *THE JOURNAL*. The report of Dr. Charles N. Combs, Secretary-Treasurer, was accepted as printed in *THE JOURNAL*. The reports of the following committees were adopted without discussion as published in the September 1916 number of *THE JOURNAL*: Arrangements, Scientific Work, Public Policy and Legislation, Credentials, Necrology, Medical Defense, Publication and Scientific Exhibit. The report of the Committee on Administration was read. On motion duly seconded and carried, the House decided to accept all of the report as published in *THE JOURNAL* except that portion pertaining to the business management of *THE JOURNAL* and the office of Secretary-Treasurer. Motion seconded and carried that this latter part of the report be referred to the Council with instructions for them to report their recommendation to the House Friday morning.

The Secretary was instructed to send a telegram to President John H. Oliver, expressing the regret of the House of Delegates at his inability to honor them with his presence in the chair, and to further convey to him the sympathy of the House and the earnest wish that he may speedily recover from his illness.

Adjournment.

SECOND MEETING

The final meeting of the House of Delegates at the Evansville session was held Friday, Sept. 28, at 8:15 a. m., First Vice President Phares occupying the chair.

The election of officers, being the first business,

resulted in the selection of the following to serve for one year beginning Jan. 1, 1918:

President, Dr. Joseph Rilus Eastman, Indianapolis.

First Vice President, Dr. V. V. Cameron, Marion.

Second Vice President, Dr. H. H. Martin, Laporte.

Third Vice President, Dr. E. A. Sturm, Jasper.

Secretary-Treasurer, Dr. Charles N. Combs, Terre Haute.

Delegates to the A. M. A. for two years, Dr. Charles Stoltz, South Bend; Dr. A. E. Bulson, Jr., Fort Wayne. Alternates, Dr. E. E. Evans, Gary; Dr. H. B. Hill, Logansport.

Chairman of Committee on Medical Defense, Dr. A. E. Sterne, Indianapolis.

The Thirteenth Councilor District reported the election of Dr. H. H. Miller, South Bend, to the office of councilor for the three years beginning Jan. 1, 1918, succeeding Dr. McDonald.

The following three amendments to the Constitution, having been read at the previous annual session at Fort Wayne and having been published twice in *THE JOURNAL*, were presented for adoption, and the motion to adopt each change was carried. Article V to read, "The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies, (2) the Councilors, (3) the last three ex-presidents, and (4) ex officio, the president and secretary of the Association."

Article IX, Section 4, to read as follows, adding the words: "and provided further, that if a councilor district society fails to meet to elect its councilor, the councilor for said district shall be elected by the House of Delegates."

Article II, concerning the annual dues to the association, to be amended to read \$4 instead of \$2.

Dr. W. N. Wishard offered the following amendment to the By-Laws, Chapter 1, Section 1, to amend by adding the following: "Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association."

This amendment will be voted on at the first meeting of the House of Delegates at the next session.

At the request of Dr. Oliver, Dr. Wishard presented the following resolution:

WHEREAS, The advanced requirements resulting from the enforcement of the laws of the various states relating to the practice of medicine and dentistry has greatly decreased the number of physicians and dentists annually graduated; therefore be it

Resolved, That it is the sense of the House of Delegates of the Indiana State Medical Association that military exemption be granted to all medical students and to junior and senior dental students.

Motion was made and seconded to send a copy of the above resolution to the Surgeon-General of the United States. Motion carried.

Dr. E. M. Shanklin, chairman pro tem of the council, reported that the council had deliberated upon the report of the Administration Committee, which advised the abolition of the office of Secretary-Treasurer and moving the management of *THE JOURNAL* to the Indianapolis office, and voted to recommend to the House the postponement of action on such radical changes for one year.

Moved and seconded that the House of Delegates concur in this report and lay the recommendation of

this Committee on Administration on the table until next year. Motion carried.

A resolution was adopted that the Committee on Administration hereafter be composed of three members to be elected by the House of Delegates, one member to be elected for one year, one for two years and one for three years, and thereafter for the term of three years in rotation, and that the Executive Secretary and the Editor-Manager of *THE JOURNAL* be permanent members of that committee.

Moved and carried that the President appoint a committee of three for this work for the next year, and that permanent elections be made by the House of Delegates at the next session.

A resolution was adopted authorizing the Committee on Administration.

Resolved, That the House of Delegates authorize the Committee on Administration to continue the maintenance of the office of Executive Secretary as conducted during the past year, including the appointment of Secretary.

Motion carried.

Motion made and seconded that the Secretary be instructed to write a letter of regret to Dr. Oliver because of his illness, extending best wishes for a speedy recovery. Motion carried.

Motion was made and seconded to offer the profession of Evansville and the citizens of the city a vote of thanks for all courtesies extended. Motion carried.

Place of meeting for 1918 session, Indianapolis; time, Sept. 27, 28 and 29.

Adjournment.

COUNCIL

A regular meeting of the Council was held at 5 p. m., Thursday, September 27, with the following councilors present: Drs. E. E. Morgan, G. G. Eckhart, G. W. H. Kemper, O. J. Gronendyke, E. M. Shanklin, F. A. Tucker, J. D. Heitger and W. R. Davidson. Drs. A. E. Bulson, Jr., C. N. Combs and A. E. Sterne were also present.

The report of the Administration Committee, as it pertains to the changes in the office of Secretary-Treasurer and the business management of *THE JOURNAL*, was before the meeting, having been referred to it by the House of Delegates for action. After a discussion, including a statement from Dr. Sterne, the chairman of the committee, it was moved and carried that the Council recommend to the House of Delegates that it defer action on these changes until next year.

Adjournment.

PULASKI COUNTY

The Pulaski County Medical Society met at Francesville on the evening of August 28th. A dinner was served to the members at Commercial Hotel, after which meeting was called to order by president, Dr. W. H. Thompson, in lecture room of new Public Library. Dr. Stone was chosen secretary in the absence of Dr. Linton. Papers were read by Drs. F. L. Sharrer, R. J. Ives and G. W. Thompson. Members present were G. W. and W. H. Thompson, J. C. and F. L. Sharrer, R. J. Ives, E. E. Johnson, L. P. Collins, R. P. Hackley and L. L. Stone. Meeting adjourned to meet in Star City, September 25.

L. L. STONE, Secretary pro tem.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

CONCENTRATED SOLUTION SODIUM HYPOCHLORITE-MULFORD.—A 5 per cent. aqueous solution of sodium hypochlorite containing free chlorine equivalent to 0.2 to 1.0 per cent. of sodium hypochlorite. One volume is diluted with nine volumes of water and the amount of boric acid required (stated on the label) to render the solution neutral is added. This dilution is used in the irrigation method of treating infected wounds. The H. K. Mulford Company, Philadelphia (*Jour. A. M. A.*, Sept. 1, 1917, p. 727).

CALCREOSE.—A mixture containing approximately equal weights of creosote and lime in chemical combination. It is stated that, when administered internally, calcreose has the same actions as creosote. It is claimed that it is not likely to produce gastric distress, nausea or vomiting. Calcreose is sold in the form of powder, as Solution Calcreose and as Calcreose Tablets, 4 grains. The Maltbie Chemical Co., Newark, N. J.

BETANAPHTHOL BENZOATE-CALCO.—A brand of betanaphthol benzoate, complying with the New and Nonofficial Remedies standards. The Calco Chemical Co., Bound Brook, N. J. (*Jour. A. M. A.*, Sept. 8, 1917, p. 821).

THIOL-ROCHE.—Thiocol is the potassium salt of orthoguaiacol sulphonic acid, obtained by sulphonating guaiacol. Thiocol-Roche acts as a sedative expectorant. It has the advantage over guaiacol in that it is comparatively tasteless, does not disturb digestion and is nontoxic. It is claimed to be useful in the treatment of diseases of the respiratory tract, incipient tuberculosis and certain diarrheas. Thiocol-Roche is supplied in the form of a powder, as Syrup-Thiocol and as Thiocol-Roche Tablets, 5 grains. The Hoffmann-LaRoche Chemical Works, New York (*Jour. A. M. A.*, Sept. 15, 1917, p. 911).

DICHLORAMINE-T. ABBOTT.—Paratoluenesulphonatedichloramide. This is said to act much like chlorazene, but capable of being used in solution of eucalyptol and liquid petrolatum, thus securing the gradual and sustained antiseptic action. Like chlorazene, dichloramine-T, Abbott is said to act essentially like the hypochlorites, but to be less irritating to the tissues. Dichloramine-T, Abbott is said to be useful in the prevention and treatment of diseases of the nose and throat. It has been used with success as an application to wounds, dissolved in chlorinated eucalyptol and chlorinated paraffin oil. The Abbott Laboratories, Chicago.

CHLORINATED EUCALYPTOL-DAKIN.—Eucalyptol chlorinated at ordinary temperature. It is used as a solvent for dichloramine-T. The Abbott Laboratories, Chicago.

CHLORINATED PARAFFIN OIL-DAKIN.—Liquid petrolatum, chlorinated at ordinary temperature. It is used as a diluent for solutions of dichloramine-T in chlorinated eucalyptol-Dakin. The Abbott Laboratories, Chicago.

HYCLORITE.—A solution of chlorinated soda, each 100 Gm. being stated to contain sodium hypochlorite 4.05 Gm., sodium chloride 3.20 Gm., calcium hydroxide 0.25 Gm., inert salts 0.92 Gm. It contains not less than 3.85 per cent. available chlorine. Hyclorite has the action and uses of solution of chlorinated soda, U. S. P., but its available chlorine content is greater. One volume of hyclorite diluted with seven volumes of water has the same available chlorine content as neutral solution of chlorinated soda-N. N. R., and is said to be isotonic. The available chlorine content of hyclorite decreases at the rate of about 12 per cent. per year. In order that allowance for this deterioration may be made in the preparation of dilutions to be used in the irrigation treatment of wounds, each bottle of hyclorite bears the date of bottling. The General Laboratories, Madison, Wis. (*Jour. A. M. A.*, Sept. 29, p. 1081).

PROPAGANDA FOR REFORM

CHAMLEY, CANCER QUACK.—S. R. Chamley, sometimes spelling his name Chamlee, is the "cancer cure" quack who frightens impressionable women into the belief that "any lump in woman's breast is cancer." In spite of repeated prosecutions by the postal authorities, he is still active. Now he offers to instruct homeopaths and eclectics in the "cancer cure" business. Chamley asks that mail be sent to "Homeopathic Cancer College," Los Angeles, Calif. (*Journal A. M. A.*, Sept. 1, 1917, p. 749).

BON-OPTO.—Bon-Opto is advertised to make weak eyes strong. The following nonquantitative and meaningless formula is furnished: "Chloretone, Zinc Sulphate, Sodium Chloride, Boric Acid, Menthe Poivre, Camphre de Menthe." The state chemists of New Hampshire report that Bon-Opto contains: sodium chlorid (common salt), 39.52; zinc sulphate (white vitriol), 6.83; boric acid, 39.69; menthol, a small amount (*Jour. A. M. A.*, Sept. 1, 1917, p. 750).

WILSON'S WA-HOO BITTERS.—"C. K. Wilson's Original Wa-Hoo Bitters" was sold as a "Great Blood and Nerve Tonic" and as an unfailing specific for partial paralysis, St. Vitus Dance and all forms of weakness. Federal chemists reported the product to be a watery solution (slightly sweetened) of Epsom salt, salicylic acid and a laxative plant drug with indications of sassafras, gentian and prickly ash. The therapeutic claims were declared false and fraudulent by the government authorities (*Jour. A. M. A.*, Sept. 1, 1917, p. 750).

FERRIVINE, INTRAMINE AND COLLOSOL IODINE.—The Council on Pharmacy and Chemistry reports that Ferrivine, Intramine and Collosol Iodine, sold in the United States by E. Fougera & Co., Inc., were found inadmissible to New and Nonofficial Remedies. Ferrivine and Intramine are advertised for the treatment of syphilis, while Collosol Iodine, mercury and iodides are recommended as adjuvants. A carefully controlled

clinical trial made by L. W. Harrison and C. H. Mills and reported in the *Lancet* indicated that Ferrivine and Intramine are inefficient as spirocheticides and that the local and general reactions that follow the injection are severe. They say that in the case of Intramine "the pain is undiluted torture" (*Jour. A. M. A.*, Sept. 8, 1917, p. 841).

TYRAMIN AS AN ADJUNCT TO MORPHIN IN LABOR.—Henry G. Barbour, Yale University Medical School, aided by a grant from the Therapeutic Research Committee of the Council on Pharmacy and Chemistry, has studied the effects of tyramin on the action of morphin in labor. In labor morphin exhibits one desirable effect, analgesia, and two untoward results, namely, respiratory depression in the child and delay of labor. Experimental work at Yale having given no support to the use of scopolamin as an adjunct to morphin in labor, tyramin and similar bodies were studied. Animal experiments demonstrated that tyramin (para-hydroxy-phenyl-ethyl-amin-hydrochlorid) counteracted the respiratory depression of morphin. In man, from 40 to 50 mg. of tyramin, administered simultaneously with a therapeutic dose of morphin of 16 mg., completely antagonized the depressant action of morphin on the respiration. The effects of morphin-tyramin on normal labor is being studied at Yale. So far it appears that analgesia is as complete as if morphin were given alone. The respiration of the mother is increased rather than depressed and the condition of the children is quite satisfactory. Further, the uterine contractions have always been increased in frequency and in degree (*Jour. A. M. A.*, Sept. 15, 1917, p. 882).

MUSTEROLE POISONING.—D. I. Macht reports the case of a scarlatiniform eruption, evidently caused by an application of Musterole, a proprietary composed essentially of lard or some similar material, oil of mustard, menthol and camphor. Macht reports on the effects of mustard oil and warns against its careless use (*Jour. A. M. A.*, Sept. 15, 1917, p. 901).

EMETIN DIARRHEA.—Emetin not rarely produces a bloody diarrhea in the course of its clinical use in the treatment of amebic dysentery. The symptoms and the gross appearance of the stools in emetin diarrhea are almost indistinguishable from those of amebic dysentery. Contrary to a prevalent opinion, children are not especially resistant to the effects of emetin, and the dosage for them must be graduated with great care (*Jour. A. M. A.*, Sept. 15, 1917, p. 916).

SPURIOUS NEOSALVARSAN.—"Dr." Nicholas Clements is under indictment in New York City for manufacturing and selling imitation neosalvarsan. The material was put up in packages made to resemble in outward appearance the genuine article. It proved to be common salt colored yellow (*Jour. A. M. A.*, Sept. 15, 1917, p. 930).

PIERCE'S ANURIC TABLETS.—According to the World's Dispensary Medical Association, Anuric is the newest discovery in chemistry, whereas, in fact, it is a worthless and dangerous nostrum sold as a cure for kidney disease. The A. M. A. Chemical Laboratory reports that from a qualitative analysis, Anuric Tablets contained sugar, acetate, iodid and salicylate of either sodium or potassium, quinine, aloin, hexamethylenamin

and plant drugs. The composition of the tablets was so evidently irrational and absurd that an exhaustive analysis was not deemed worth while (*Jour. A. M. A.*, Sept. 15, 1917, p. 930).

VENARSEN.—F. A. Brayton used Venarsen in a series of active syphilitics to determine its therapeutic value. The clinical study was made because many physicians consider this sodium cacodylate preparation as an efficient substitute for salvarsan, even referring to it as "Denver salvarsan." His study confirms the experience of others, namely, that Venarsen is worthless in the therapy of syphilis. He also reports that a venous sclerosis was produced in each case in which the drug was administered and that it is capable of producing a severe nephritis (*Jour. Ind. State Med. Assn.*, Sept. 15, 1917, p. 339).

VOLATILE IRRITANTS IN COLLAPSE.—To determine the action of so-called circulatory stimulants that are commonly administered by subcutaneous injection in shock or allied conditions, Lieb and Herrick have studied the effects of injections of alcohol, ether, camphor and ether, camphor and oil, and turpentine in animals decerebrated so that the pain factor would be entirely excluded. They conclude that the transitory rise in blood pressure that these medicaments produce is entirely reflex in character. The heart plays little or no part in the process, the response being effected through the vasomotor apparatus. The use of injections of camphor in oil, or camphor in alcohol, to stimulate an anesthetized or profoundly prostrated or unconscious patient, therefore, has no experimental justification and its employment is seriously to be questioned (*Jour. A. M. A.*, Sept. 22, 1917, p. 1008).

WHEELER'S TISSUE PHOSPHATES.—A leaflet devoted to the exploitation of Wheeler's Tissue Phosphates approvingly quotes the criticisms of the hypophosphites and the glycerophosphates by *The Journal A. M. A.* However, the leaflet fails to quote *The Journal's* estimate of the "Tissue Phosphates" which was: "'Wheeler's Tissue Phosphates' is an unscientific shotgun mixture whose most active and powerful drug is the alcohol it contains. That it was not years ago relegated to the realms of obsolete and discarded preparations is a commentary alike on the lack of scientific discrimination and on the power of advertising" (*Jour. A. M. A.*, Sept. 22, 1917, p. 1010).

AMMONOL.—The *New York Medical Journal* advertises Ammonol as "The Stimulant, Ethical Antipyretic and Analgesic." There we learn, in part, that this very ordinary mixture of acetanilid, ammonium carbonate and sodium bicarbonate is "a specific in Fevers, Neuralgia, Atonic Dyspepsia, Pneumonia, Gastralgia, Bronchitis, Coryza, Catarrhal Influenza, La Grippe, Rheumatism, Hysteria, Alcoholism, Amenorrhoea, Dysmenorrhoea, Uterine and Intestinal Colic, Obstinate Vomiting, Catarrh of the Bile Ducts and Jaundice" (*Jour. A. M. A.*, Sept. 22, 1917, p. 1010).

FAKE NEOSALVARSAN.—The Department of Health of the City of New York has prepared a table whereby the suprious "neosalvarsan," recently located there may be identified. The department urges physicians to destroy all salvarsan and neosalvarsan containers after the use of the drug, to prevent illegitimate use of these containers (*Jour. A. M. A.*, Sept. 22, 1917, p. 1021).

"NIKALGIN."—A recent issue of *Collier's* contains an article on "Nikalgin." Far-reaching claims for its anesthetic and antiseptic virtues have been made. While no very definite information seems to be forthcoming regarding the preparation, it has been said to be "composed of quinine, hydrochloric acid and urea." This would indicate that "Nikalgin" may be nothing more wonderful than the well-known local anesthetic, quinine and urea hydrochloride, or a modification of it (*Jour. A. M. A.*, Sept. 22, 1917, p. 1024).

AMERICAN-MADE SYNTHETICS.—The Council on Pharmacy and Chemistry announces that, with the aid of the A. M. A. Chemical Laboratory, it proposes to make a study of the quality of American-made synthetics. This control of synthetic drugs, which as a result of the war are now made in this country, is believed to be in the interest of the American industry, for the protection of the public and for the satisfaction of physicians. Since the manufacture of some of the synthetic drugs is to some extent experimental in this country, the Council feels confident that the responsible manufacturer will welcome this study as the best way of establishing complete confidence in his products (*Jour. A. M. A.*, Sept. 22, 1917, p. 1018).

ESKAY'S NEURO PHOSPHATES.—The Council on Pharmacy and Chemistry reports that Eskay's Neuro Phosphates (Smith, Kline & French Co., Philadelphia) is claimed to contain alcohol 17 per cent. and sodium glycerophosphate 2 grains, calcium glycerophosphate 2 grains, strychnine glycerophosphate 1/64 grain, in each dessertspoonful. It is called a "Nerve Tissue Reconstructive," and the advertising claims are based on the discredited theory that certain disorders are due to a deficiency of phosphorus in the nerve structures of the body, and that glycerophosphates are assimilated more readily than ordinary phosphates. The Council held Eskay's Neuro Phosphates ineligible for New and Nonofficial Remedies because of the unwarranted therapeutic claims made for it, because the combination is irrational and because the name is not descriptive of its composition (*Jour. A. M. A.*, Sept. 29, 1917, p. 1102).

K-Y LUBRICATING JELLY.—The Council on Pharmacy and Chemistry reports that K-Y Lubricating Jelly (Van Horn and Sawtell, New York) originally advertised as a lubricant for instruments and the hands, is now also recommended as a therapeutic agent. The Council held K-Y Lubricating Jelly in conflict with Rules 1, 4, 6 and 10 (*Jour. A. M. A.*, Sept. 29, 1917, p. 1102).

BOOK REVIEWS

SURGICAL CLINICS OF CHICAGO. August, 1917. Vol. I, No. 4. With 71 illustrations. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

This issue contains some 200 pages of very interesting and very instructive clinics by some of the well-known clinical surgeons of Chicago. There are fifteen different contributors to this volume, and their clinics include quite a wide range of clinical material. It is very profitable indeed, to follow up these clinics as they appear in each issue.

PROGRESSIVE MEDICINE. Volume XX, No. 3 (September, 1917). Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Assisted by Leighton F. Appleman, M. D., Instructor in Therapeutics, Jefferson Medical College. Paper, \$6 per annum. Lea & Febiger, Publishers, Philadelphia and New York.

Ewart takes up about the first seventy-five pages with his review of "Diseases of the thorax and viscera, including the heart, lungs, and blood vessels." Gottlieb gives the usual very instructive review of dermatology and syphilis. The review of obstetrics by Edward P. Davis is quite lengthy, comprising some eighty-five pages, and is the most voluminous in this issue. The concluding review is that of diseases of the nervous system by Spiller.

Each one of the foregoing reviews is very ably presented by the respective authors, who already have enough experience in this work to know what to give and how to present it.

THE ELEMENTS OF THE SCIENCE OF NUTRITION. By Graham Lusk, Ph.D., Sc.D., F.R.S. (Edin.), Professor of Physiology at Cornell Medical School, New York. Third Edition, Reset. Octavo of 641 pages, illustrated. Cloth, \$4.50, net. Philadelphia and London. W. B. Saunders Company, 1917.

The aim of this book is the same now as it was in the past, i. e., "to review the scientific substratum on which rests present-day knowledge of nutrition both in health and in disease." The profession already is well acquainted with this author and the scope of his work on nutrition. In the eight years since the last (second) edition appeared a great many facts have been learned and considerable progress in general has been made in the science of nutrition. This science has become such an important one in clinical medicine that not only specialists but all progressive general physicians are devoting to it a great deal of attention. A good book on nutrition fills a real need at this time, and since this work is one of the best that have appeared recently it will go a long way toward filling that need, so that it ought to and it no doubt will meet with wide, general popularity.

BUILDING HUMAN INTELLIGENCE. By Dr. Arnold Lorand, Physician to The Baths, Carlsbad. Translated from the German by Philipp Fischelis, M.D., Acting Associate Professor of Histology and Embryology, University of Pennsylvania. Cloth. \$3 net. Philadelphia: F. A. Davis Company, 1917.

This book probably is not intended primarily for physicians in general. It may be of some value to those laymen who take an active interest in subjects of this kind, for it contains many well-known ideas that are presented in a rather attractive manner. But to physicians this book will hardly be of much—if any—value, for it brings out nothing that is really new or that the great mass of physicians have not learned already from other sources.

There is evidence of carelessness in the make-up of this book, namely: on page 26 we find "pallor" for pallor; on page 68 "insance" for insane; on page 101 "the" for she; on page 408 "L" for I; in the table of contents Chapters 43 and 47 are both indexed as beginning on page 344. Attention also must be called to the author's use of the term "hypothyroiditis," where he evidently means to use hypothyroidism.



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PEDIATRICS AND ORTHOPEDIC SURGERY. Volume V of the Practical Medicine Series for 1917. Pediatrics, Edited by Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical School; Attending Physician Michael Reese Hospital. With the Collaboration of A. Levinson, M.D., Associate Pediatrician, Michael Reese Hospital. Orthopedic Surgery, Edited by John Ridlon, A.M., M.D., Professor of Orthopedic Surgery, Northwestern University Medical School. With the Collaboration of Charles A. Parker, M.D. Cloth, \$1.35. Price of the series of ten volumes, \$10. The Year Book Publishers, Chicago, 1917.

About two thirds of this volume is taken up by Abt and Levinson with their review of the progress made in pediatrics during the past year, and the other third by Ridlon and Parker with their review of the advances made in orthopedic surgery. Those interested in either or both of these branches of medicine can find in this book all the information to be obtained from the current literature in condensed form and presented in the attractive manner so well known to all readers of the Practical Medicine Series.

A TEXT-BOOK OF FIRST AID AND EMERGENCY TREATMENT. By A. P. Burnham, M.D., Med. Corps, U. S. A., Instructor in Surgery in the Polyclinic Hospital, New York City; Attending Surgeon, Dept. of Surgery, Vanderbilt Clinic, College of Physicians and Surgeons, New York City. Illustrated with 160 engravings and 2 plates. Cloth, \$2. Lea & Febiger, Publishers, Philadelphia and New York, 1917.

A good book on first aid and emergency treatment ought to be in every household, and every adult ought

to be familiar to a certain extent with the essentials of such treatment. Among the books that can be recommended very highly for such a purpose is this new book. It gives the untrained person just what he needs to know so that he may successfully apply the principles of first aid whenever the emergency arises. The modern methods of treatment are given special prominence, but older methods of value are not omitted. In some respects this volume is quite complete, so that the more advanced and more interested worker can find therein enough information to enable him to assume greater responsibility in undertaking the temporary care of the sick and wounded.

The illustrations are numerous, all very good, and some unusually so. They help tremendously in emphasizing and making clear the subject matter.

HANDBOOK OF GYNECOLOGY. For Students and Practitioners. By Henry Foster Lewis, A.M., M.D., Professor and Head of Department of Obstetrics and Gynecology in Loyola University School of Medicine; Chief of Obstetric Staff of Cook County Hospital; Fellow and ex-President of Chicago Gynecological Society; Late Assistant Professor of Obstetrics and Gynecology in Rush Medical College; and Alfred de Roulet, B.Sc., M.S., M.D., Professor of Gynecology in Loyola University School of Medicine; Attending Gynecologist to the House of the Good Shepherd and to St. Bernard's Hospital; Obstetrician and Chief of Staff of St. Margaret's House and Hospital. With 177 illustrations. Cloth. St. Louis: C. V. Mosby Company, 1917.

This is a book which has been primarily adapted to the needs of third and fourth year medical students, as well as the young general practitioner. It is not an exhaustive text, but it gives the principles and practice

of gynecology fully enough for a handbook such as this is, and in such clear and concise style that the student or practitioner can get from it without difficulty the information contained therein.

The classification given is the authors' original idea of what it should be, and it differs somewhat from that usually found in texts on this subject. The illustrations are abundant and of a high degree of excellence.

This new book may be expected to serve well the purpose for which it was intended. To those who feel the need of a handbook on gynecology this book ought to be quite useful.

MAN—AN ADAPTIVE MECHANISM. By George W. Crile, F.A.C.S., Professor of Surgery, School of Medicine, Western Reserve University; Visiting Surgeon to the Lakeside Hospital, Cleveland. Edited by Annette Austin, A. B. Illustrated. Cloth, \$2.50. New York, The Macmillan Company, 1916.

The idea which Crile emphasizes in this book is that the human organism is an adaptive mechanism which has reached its present condition in the struggle for existence through the many centuries of the past. Obviously the idea is not an original one, but the author has spent more than twenty years in having this theme investigated and studied in his laboratory and clinic. During that period he has obtained much interesting data, has evolved certain theories, and has written quite a good deal on this subject.

In this new book he presents his argument for the underlying idea, and furnishes the accumulated experimental and clinical data. The data, he states, are so extensive that only summaries can be given in this book. The details of most of the investigations and a review of the literature are not given, but may be expected in another publication, he says.

This subject, especially when presented in the manner treated by this author in this book, ought to appeal to the whole medical profession. It is one of the most interesting of all biological as well as philosophical problems. Anything new one can learn along this line is well worth knowing, indeed. This book contains so much that is really new and original that it will be greatly appreciated by every one who reads it.

THE CAUSES OF TUBERCULOSIS. Together with Some Account of the Prevalence and Distribution of the Disease. By Louis Cobbett, M.D., F.R.P.S., University Lecturer in Pathology, Cambridge (England). Cloth, \$6.50. Cambridge: At the University Press, 1917. American Representatives, G. P. Putnam's Sons, New York.

This is quite a comprehensive book of about 700 pages in which tuberculosis is discussed from the points of view indicated in the title. This book is intended not only for the medical and allied professions, but for the laity as well, and it contains an abundance of valuable information for all. Every intelligent human being is interested in the problem of stamping out tuberculosis, and is eager to cooperate as much as he can to accomplish that purpose. Useful knowledge such as that brought out in this book must be brought home to the layman to enlighten him on some of the aspects of the great problem of the prevention of tuberculosis. In getting out this volume, therefore, both the author and publishers have rendered a distinct service, the importance of which cannot be overestimated.

This is not a clinical textbook on tuberculosis. The author appreciates that many good clinical texts already have been contributed by many eminent clinicians. His presentation of the subject is rather from the point of view of the experimental pathologist. The

author need not fear that this limits the scope of the work. The fact that he has contributed some 700 pages containing information of the kind that is least known by medical men and the public at large certainly ought to make this volume one of unusual value to all those interested in the control and prevention of tuberculosis.

TEXTBOOK OF SURGICAL OPERATIONS. Volume II. Illustrated by Clinical Observations for Physicians and Students, by Prof. Fedor Krause, Privy Medical Councilor, Directing Physician Augusta Hospital, Berlin, in Association with Emil Heyman, M.D., Chief Physician, Augusta Hospital. Translated into English and Edited for American Readers by Albert Ehrenfried, A.B., M.D., F.A.C.S., First Assistant Visiting Surgeon, Boston City Hospital; Junior Assistant Surgeon, Children's Hospital; Surgeon, Boston Consumptives' Hospital. In six volumes. 373 illustrations in two or more colors. Price, cloth, \$7. New York: The Rebman Company, 1917.

It is a difficult thing to do justice to a review of this excellent work, the second volume of which maintains the very high standard established by the first volume. As has been so well stated by the publishers, this is a practical book, written by a practical man with a practical aim in view. It does not claim to be a system of great operative technic in which all technics are set forth exhaustively, in which every detail is described and discussed at full length, nor does it claim that the reading of it will make a trained surgeon of the beginner, but it does give in a compact form, that makes the handling of the book easy, a remarkable amount of surgical meat. It reflects the teachings of many years of a man who has given to a number of German practitioners the bulk of what they know in surgery.

The subjects are discussed by the presentation and discussion of actual cases which are carefully followed from the beginning through the operative treatment to the end results. It is the application of the case-teaching method of surgery. The well-known American author in making the work adapted to the use of American physicians has attempted to give an accurate transcription of the German text, though he has not hesitated to modify and rearrange freely wherever it seemed advisable. In some instances whole sections and paragraphs have been rewritten and technical and controversial discussions have been abridged, and new matter, illustrations and cases have been added. In short, an attempt has been made to naturalize this German book to adapt it for the serious study of the American student and for the reference and assistance of the working American surgeon.

The completed work is in six volumes, and this second volume, comprising 715 pages, is devoted to the surgical procedures of the upper and lower jaw, the oral cavity, the pharynx, salivary gland, facial and cervical nerves and brain. Nearly 300 pages are devoted to the latter subject, and include the surgical treatment of epilepsy, the surgery of brain tumors, the operative treatment of brain abscess, brain injuries, purulent meningitis, cranial tuberculosis, etc. The discussion of all of these subjects is in that careful, painstaking manner, with close attention to detail, which makes for an ideal textbook for the student and general practitioner, for it is neither too elementary for the practitioner nor too advanced for the student. The book is abundantly illustrated, and the illustrations scarcely could be surpassed. In fact, the mechanical excellence of the book is a credit to the publishers. We cordially recommend it to the profession.

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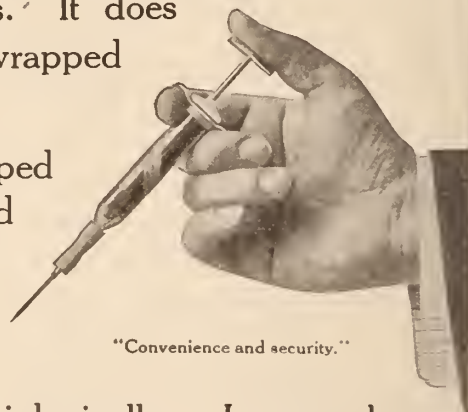
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ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
Abdominal Wounds in War. Joseph Rilus Eastman, M.D., Indianapolis		417	Typhoid Transmission		429
Pretended Blindness and Deafness and Their Detection. George F. Keiper, M.D., Lafayette		422	Opposition to Tonsillectomy and Adenectomy		429
The Wassermann Reaction. The Necessity for a Clearer Understanding of Its Significance and Fallacies. B. W. Rhamy, M.D., Fort Wayne		427	The Significance of the Widal Reaction		430
			Sanitation at Fort Benjamin Harrison		430
			Annual Convention of the American Association of Military Surgeons		432
			Editorial Notes		433

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPT. 25, 26, 27, 1918.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		MISCELLANEOUS	
	PAGE		PAGE
The Eighth Indiana District Medical Society	453	Deaths	440
Carroll County Medical Society	453	News Notes and Personals	440
Madison County Medical Society	454	Correspondence	453
		The Truth about Medicines	454
		Book Reviews	455

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Indianapolis, September 25, 26 and 27, 1918

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NUMBER 11

ORIGINAL ARTICLES

ABDOMINAL WOUNDS IN WAR *

JOSEPH RILUS EASTMAN, M.D.
INDIANAPOLIS

GENERAL CONSIDERATIONS

The present war has witnessed important development in the department of gunshot abdominal wounds. In previous wars it has been held as a dogma that gunshot injuries of the abdomen should be treated conservatively as distinguished from the teaching of prompt operation in civil practice.

The old plan of "rest and opium" still has some advocates but the weight of opinion is in favor of applying in military practice the civil method of immediate operation (within twelve hours) in all penetrating wounds of the abdomen, wherever the favorable conditions of civil practice can be provided, including a skilled operator, trained assistants, a sufficient armamentarium, and last but not least, an aseptic environment.

The advocates of the nonoperative treatment of gunshot abdominal wounds have in the past laid considerable stress on the theory that in perforation of the intestine a mucous membrane cork is forced by gas pressure into the wound of the muscularis and serosa effectually preventing the escape of bowel contents into the peritoneal cavity. This is probably an erroneous assumption. Such a plug of mucous membrane, if indeed it should be present in a wound gaping from retraction and tetanic contractions of the muscularis, would doubtless do more harm than good, since it would prevent healing of the serosa and patching by the omentum. There is no doubt but that occa-

sionally gunshot perforation of the intestine results in local circumscribed abscess formation and rarely in practically aseptic healing. As a rule, however, death results from perforation peritonitis. The statistics of the advocates of conservatism may also be somewhat misleading, for example, those of Goldammer, who in the Greeko-Turkish War, treated thirty cases of abdominal gunshot wounds without operation with twenty-seven recoveries. It is not clear, from this report whether a large percentage of these cases were instances of simple penetration without perforation.

It is likely that the best explanation of the improved statistics of operation in this war is to be sought in the favorable conditions of the trench forts, the battle lines being in the main more stable than in former wars and allowing of better preparation for operating near the front.

Gunshot injuries of the abdomen may be classified as follows:

1. Slight superficial wounds: (a) contusion; (b) tangential gunshot of skin and fat; (c) injury of musculature of abdomen, flank, back and buttocks; (d) injury of the peritoneum without penetration of abdomen.

2. Deep and serious wounds: (a) extraperitoneal injury of hollow viscera, rectum, bladder and colon; (b) extraperitoneal injury of parenchymatous organs, for example, the kidney; (c) intraperitoneal injury of hollow viscera by missile; (d) intraperitoneal injury of parenchymatous organs by missile; (e) intraperitoneal injury of blood vessels; (f) complicated intraperitoneal injuries, for example, simultaneous wounding of hollow viscera, parenchymatous organs and vessels; (g) rare injuries, for example, those in which an intraperitoneal hollow viscus or parenchymatous organ is wounded by the impact of a missile against the peritoneum without penetration of

* Read before the Indiana State Medical Association at the Evansville Session, September, 1917.

the latter; (h) injuries of intraperitoneal viscera as the result of the explosive force of missiles striking the pelvis or chest or of blunt objects striking the abdomen: example, rupture of the intestine from high velocity bullet traversing the pelvis without entering the peritoneal cavity or rupture of a gut filled with gas or fluid as the result of a blow to the abdomen. (i) Wounds of the abdominal viscera complicated with wounds of chest.

EFFECTS OF THE VARIOUS MISSILES

A smooth undeformed bullet as a rule makes a small canal in the abdominal wall and a small easily sutured opening in a hollow viscus unless the shot be tangential to the gut. However, such a small smooth bullet usually produces an irregular laceration of a parenchymatous organ. The aperture of entrance being smaller and more clear cut than the aperture of exit.

Irregularly deformed bullets naturally produce larger and more ragged wounds than do smooth ones, for example, the fragmented nickel or steel mantle partially split off and projecting from a lead center bullet may do frightful damage.

Large grenade fragments do not as a rule penetrate deeply but often cause extensive crushing and laceration of the abdominal wall. Small grenade fragments often do very little injury but may produce a deceptive wound, that is, the wound of the abdominal wall may seem insignificant, whereas the intra-abdominal injury is extensive and serious.

Shrapnell balls often remain impacted in the abdominal coverings. They are of low velocity and usually retain their smoothness and rotundity and do comparatively little damage to viscera, considering their large size. They rarely completely traverse the abdomen.

GENERAL SYMPTOMATOLOGY

The general symptoms in abdominal wounds may be divided into three groups:

1. Symptoms of simple nonpenetrating wounds of the abdominal wall.
2. Symptoms of penetrating wounds.
3. Symptoms of perforating wounds or rupture of viscera.

In Group 1 the symptoms are those commonly found in superficial wounds.

In Group 2 the symptoms are those of superficial wounds to which may be added the phenomena of intra-abdominal hemorrhage and peritonitis, the latter being only occasionally present and as a rule less serious than when perforation exists.

Symptoms of intra-abdominal hemorrhage without perforation:

1. Rapid weak pulse.
2. Subnormal temperature.
3. Rapid respiration.
4. Pallor.
5. Thirst.
6. Pain due to stretching and displacement of the peritoneum and pull on the mesentery.
7. Distension, tenderness and rigidity of the abdominal wall occurring before sufficient time has elapsed for development of peritonitis.

8. Blood discharged from external wounds is light red, whereas in perforation the intestinal contents disorganize the coloring matter of the blood causing it to become darker. Likewise blood from the liver is dark in color.

The source of hemorrhage unassociated with perforation is difficult to determine before operation. It is often clear, however, that the bleeding is retroperitoneal as in wounds of the colonic vessels or the arteries of the ileopsoas muscles, notwithstanding the hematoma may obscure the exact location of the bleeding point.

It should be noted that serious hemorrhage may exist without discoverable symptoms. The writer observed a case of a man with penetrating rifle bullet wound of the abdomen who continued active duty for several hours after receipt of injury and whose abdomen on the first examination was filled with blood.

Hemorrhage in penetrating nonperforating abdominal wounds may be due to:

1. Injury of the vessels of the omentum or mesentery.
2. Injury of the vessels of the folds of peritoneum, for example, that forming the gastrocolic ligament.
3. Injury of the liver, spleen, pancreas or kidney.
4. Incomplete nonperforating injury of the stomach or intestine.
5. Various combinations of these injuries.

GENERAL SYMPTOMS AND SIGNS OF ABDOMINAL WOUNDS WITH PERFORATION

1. Site of aperture of entrance (presumptive sign if in anterior abdominal wall).
2. Pain. Gripping or colicky about the umbilicus, later radiating to chest and groins.
3. Vomiting. (If blood is vomited, stomach is probably perforated.)
4. Hiccupping.
5. Costal breathing.

6. Syndrome of shock (may also be due to hemorrhage without perforation).

7. Tympany. (Marked over upper abdomen when the patient is in the dorsal recumbent position and most marked over left hypochondrium when the patient lies on the right side.

8. Board like rigidity of abdominal muscles (reflex).

9. Abdominal tenderness.

10. Emphysema of the cellular tissue of the abdominal wall occurring after wounds of the colon from bacillus coli infection.

11. Elevation of temperature and other phenomena of perforation peritonitis.

There are three signs which as stated by LaGarde may be regarded as positive evidence of intestinal perforation.

1. Escape of intestinal gas, feces; or intestinal worms from the wound of entrance or exit.

2. Protrusion of perforated gut at the wound.

3. Passing of the missile or passing of blood by the anus, red blood indicating perforation of the colon or rectum, dark bloody stools suggesting lesion of the small intestine.

GENERAL PRINCIPLES OF TREATMENT IN ABDOMINAL WOUNDS

The treatment of wounds involving the abdominal coverings is in short the treatment of superficial wounds elsewhere. In penetrating and perforating wounds the diagnosis should be established and celiotomy done within the first five hours if conditions are favorable for a skilful and aseptic operation.

The following are deciding data as laid down by Körte:

1. Kind of missile, whether infantry or artillery.

2. Length and character of transportation required to bring the patient to the place of operation.

3. Time elapsing between injury and operation.

4. Facts as to whether the place of operation is stable so that patient may not require transportation soon after operation.

5. Availability of a trained experienced operator.

6. Facts as to whether time can be given for operation without neglect of other wounded.

Before operation is undertaken simple non-penetrating injury of the abdominal wall must be considered intelligently and excluded, like-

wise, the question of whether conservative treatment under similar circumstances relating to the wound, the patient's general state and surrounding conditions, would not be better. The rule of the present war to operate in penetrating abdominal wounds does not apply unless conditions are favorable for good operating.

Payr has advised that in all penetrating abdominal wounds with or without perforation an incision be made promptly above the symphysis for drainage.

The general treatment of cases not to be operated consists in rest in the recumbent position with shoulders raised and knees flexed. This position relaxes the abdominal musculature and adds to the comfort of the patient. No attempt should be made to move the patient unless unavoidable, nor should he be permitted to move himself. If moved before operation the Fowler position should be maintained during transport. Food by the mouth should be interdicted and water likewise should be forbidden, except that when neither nausea nor gas is present, a teaspoonful of water at intervals of fifteen minutes may be given by mouth to moisten the dry mucosa. Food and water may be given by the bowel in the case of lesions of the small intestine or stomach, the common sites of perforation. Opium should be given to control pain whether operation is to be done or not. Shock is to be combated by heat and normal salt solution hypodermatically, by rectum and by intravenous infusion.

DIAGNOSIS AND TREATMENT OF INJURIES OF THE VARIOUS INTRA-ABDOMINAL ORGANS

Stomach.—Gunshot injuries of the stomach are of frequent incidence. Perforation of the stomach when full is more serious because of the escape of contents, than when the organ is empty, notwithstanding the openings made by the missile are smaller all things being equal when the stomach is distended (Landois).

The commonest injury is that in which the aperture of the entrance is on the anterior wall and the wound of exit on the posterior wall. This of course may be reversed.

Both openings may be on the anterior wall or both may be on the posterior wall. In the latter case the stomach contents will empty into the lesser peritoneal cavity.

Landois has called attention to a frequently occurring phenomenon, namely, outpouring of stomach contents into the lesser peritoneal cavity through a wound of exit in the posterior

wall while the wound of entrance on the anterior wall discharges no contents at all.

Little value attaches to the symptoms of hematemesis in stomach wounds as it is rarely present. Wounds of the anterior stomach wall are as a rule easily found and readily closed. The wound on the posterior wall is not always easy to find nor is it easy to close by suture. Through a large opening in the gastro-colic omentum, the lesser peritoneal cavity can be mopped free of blood and stomach contents and the posterior wall inspected. Occasionally one can find the posterior wound with the finger but cannot bring it into view for closure by suture. In such a case drainage without suture is safer than blind and awkward attempts to repair the wound. An experienced surgeon will not often be driven to forego the suture of any stomach wound.

Small Intestine.—The small intestine is of all hollow viscera the most frequently perforated. Horizontal close range shots with the wound of entrance near the umbilicus produce most perforations. There may be wounds of entrance and exit in each wounded coil of gut or a single opening may be present, the result of a tangential shot. As a rule the openings are present in pairs, the wound of exit being the larger and accompanied by more marked extrusion of mucosa. Irregularly deformed nickel or steel jacketed bullets or grenade fragments may entirely divide the small gut. Of great practical importance are the wounds establishing communication from the gut lumen to the space between the peritoneal laminae of the mesentery produced by tangential shots of the small gut at its mesenteric attachment. These may be overlooked.

A few hours after perforation of the small intestine, the neighboring peritoneal surfaces become covered with plastic exudate which in the case of small wounds, for example, those from minute grenade fragments, may effectually prevent further escape of intestinal contents and occasionally lead to spontaneous cure. The benign walled off abscess is unfortunately a much less common sequel of perforation than is general peritonitis.

Treatment.—Operate if patient is not in hopeless condition and skilful aseptic operation is possible. To make sure that no injury is overlooked the entire intestine should be examined, beginning at the ligament of Trietz. Small round perforations are closed with a single purse string suture of silk or linen. An ordinary cambric sewing needle serves admirably. The purse string suture of Runyon

renders the inversion of the wound adges very easy. In larger ragged wounds of the gut a running suture is efficient in securing accurate closure of the serosa over the defect. In extensive tangential lacerations, the application of the running Lambert suture should be preceded by closure of the wound with a simple running suture traversing the entire thickness of the gut wall.

In wounds of the intestine at the mesenteric border care must be taken that the perforation in the muscular coat of the intestine itself is closed. With this in mind the edges of the wound of the mesentery should be separated to allow a good view of the opening into the intestine. After turning in the muscularis and mucosa of the gut at the site of perforation with Lembert sutures the opening in the mesentery is closed with a simple running suture.

Injuries causing complete division of the gut require circular suture, end to end anastomosis or invagination of the ends with lateral anastomosis. The latter is the safer and amounts eventually to circular suture since the gut at the site of lateral anastomosis straightens out and assumes a nearly normal conformation.

WOUNDS OF THE LARGE INTESTINES

LaGarde (Gunshot Injuries) states that gunshot wounds of the large intestine covered by peritoneum, except those of the transverse colon, are never so fatal as those of the small intestine and quotes Otis who reports fifty-nine cases of spontaneous recovery from gunshots of the cecum and ascending colon. LaGarde ascribes the more hopeful outcome of injury of this part of the gut to the fact that the walls of the large intestine are thicker and the wound is partially closed by the greater amount of tissue involved in the perforation. The interesting point is that wounds of the small intestine higher up are more likely to be associated with injuries of other vital organs than are wounds of the large gut. Most surgeons of the present war support the view of Landois that eliminating from consideration associated lesions of other organs, infection from injury with escape of contents of the large intestine is more serious than that following injury of the small gut. The contents of the cecum and ascending colon are rich in bacterial flora of virulent character, so that comparatively few patients with perforation of the colon survive even when promptly operated on. A smooth rifle ball or a small grenade fragment may produce a small wound of the colon which more or less perfectly closes itself by contraction of the

muscularis and sliding of the intestinal coats. In such a case the escape of contents being slight or nil, the chance of recovery is good if operation is performed promptly.

Retroperitoneal wounds of the colon are often overlooked, especially in fat individuals. The presence of retroperitoneal hematoma and gray or brown-gray discoloration of the peritoneum with edema or gangrene in the neighborhood of the wound are valuable signs, though not always present. Retroperitoneal wounds of the transverse colon may elude search until the lesser peritoneal cavity is opened.

Wounds of the Rectum.—Extraperitoneal injuries of the rectum nearly always recover, though the convalescence may be prolonged because of the development of fistula, cellulitis or septicemia. On the other hand all injuries of the rectum which establish communication into the peritoneal cavity are to be regarded as serious.

Wounds of the Kidney.—Owing to the small size of the organs, wounds of the kidney are not common. They are usually complicated by wounds of other important viscera. There is nearly always saturation of the fatty capsule and surrounding tissues with blood. Viewed from the abdominal side the hemorrhage manifests itself as a large retroperitoneal hematoma. Blood usually escapes from the kidney through the ureter. The bladder may become filled with dark fluid blood.

SYMPTOMS

1. Pain radiating downward to the bladder and into the thighs.

2. Hematuria is always present unless the ureter be divided or occluded.

3. Hematoma which can often be made out by physical examination of the loin.

The kidney may be ruptured as the result of tangential shots of the thorax or injuries of the soft parts of the loin. Because of its fixation and fragile structure the kidney is not infrequently injured by the remote explosive effect of missiles or by blunt objects striking the loin or chest. Thus the kidney may be extensively lacerated without being directly struck.

Treatment. Wounds of the kidney are as a rule accompanied by injuries of the intestines. If there is no evidence of perforation of the gut, the kidney injury should be treated conservatively. Even in cases of extensive hemorrhage from a kidney wound the treatment may well be conservative unless the case can be brought to operation very early and the hemorrhage is really threatening. Uncomplicated in-

juries often heal promptly. If the renal vessels are divided or great destruction of the kidney has occurred nephrectomy is required. As a rule, however, it may be stated that rifle bullet wounds of the kidney are best treated by rest and opium. Occasionally, gunshot injuries of the kidney are followed by hydronephrosis requiring incision and drainage.

Wounds of the Bladder.—Wounds of the bladder rarely produce dangerous hemorrhage. The bladder contents are normally not infectious, but if emptied into the peritoneal cavity, cause more or less chemical irritation. Obviously, extraperitoneal wounds of the bladder are less serious than those which involve the peritoneal cavity. Hemorrhage into the bladder suggests an extraperitoneal injury of the bladder. An empty bladder suggests intraperitoneal injury of the bladder with escape of urine into the peritoneal cavity.

Treatment. Intraperitoneal wounds of the bladder demand abdominal operation if conditions are favorable. If not, a retention catheter should be introduced promptly. Extraperitoneal wounds are best treated by continuous catheterization or by perineal section.

Wounds of the Liver.—A clean cut wound of the liver is rare. Lacerations are the rule. The wound of entrance is small, the wound of exit larger, and the bullet canal fusiform. Star shaped wounds are not rare. Hemorrhage is always present, the degree depending on the size of the vessels involved. Fortunately, the liver tends to tear and give way between the large vessels. Near the hilus, however, the danger of injury to large vessels is great. Liver hemorrhage often subsides spontaneously. Blood pressure in the liver is low and the bleeding may be controlled nearly always by pressure with gauze pads. In wounds of the liver communicating with the chest, hemorrhage is into the chest cavity, rather than into the abdomen, since intra-abdominal pressure is greater than intrathoracic pressure. If there be extensive laceration of the diaphragm the liver tissue may be extruded into the chest.

Treatment.—Uncomplicated gunshot wounds of the liver require no surgical treatment unless there be serious hemorrhage, and this hemorrhage may be controlled in nearly all cases by gauze packing which is left protruding at the abdominal wound. For liver suture a blunt needle and large sized catgut are used. The ends of the catgut on each side of the wound should be passed through or around gauze strips of several thicknesses to prevent cutting out.

Plates and quills and many devices have been used, but the practical thing to remember about liver hemorrhage is that it can be controlled nearly always by gauze pressure, and that attempts to suture may merely increase the laceration and hemorrhage.

Wounds of the Spleen.—Injuries of the spleen are comparatively rare. Owing to the small size of the spleen and its proximity to other important organs, uncomplicated wound of the spleen is rarely seen. Spleen wounds bleed readily like those of the liver because of the vascularity of the tissues. It is believed that injuries of the spleen at some distance from the hilus often heal spontaneously. The blood pressure is low and hemorrhage may not be serious. Treatment consists in control of bleeding by gauze pack, suture with a blunt needle or splenectomy.

Pancreas Wounds.—These are usually complicated. The hemorrhage is usually great and prognosis bad.

Treatment. The surgical indications are control of bleeding by suture or gauze pack with lumbar drainage.

COMBINED CHEST AND ABDOMINAL INJURIES

Landois divided these into five groups as follows:

1. Abdominal injuries associated with perforation of the diaphragm and pleural space. Since the pleural space extends considerably farther downward laterally and posteriorly than the upper level of the abdomen, horizontal shots may of course perforate both cavities. In such a case stomach or intestinal contents, bile or peritonitic exudate may enter the pleural space causing pleuritis.

2. Associated injury of thoracic and abdominal organs. In a complicated injury of the lung and liver the patient may cough up bile, or as in one case observed by the author, may cough up a bullet entering the lung by way of the abdomen and the diaphragm. Empyema may occur as the result of such a complication. The heart may also be injured by bullets passing through the abdomen.

3. Wounds with great laceration of the diaphragm. In such a case liver or other abdominal organs may be extruded upward into the chest.

4. Tangential shots of the lower thorax with contusion of the liver or kidney.

5. Separate or multiple injuries of the chest and abdomen.

PRETENDED BLINDNESS AND DEAFNESS AND THEIR DETECTION *

GEORGE F. KEIPER, M.D.
LAFAYETTE

The recent draft for soldiers to fill the ranks of the new National Army has made apparent the necessity for a review of the tests used to detect malingering at least so far as the eye and ear are concerned. The examination of over 1,200 men committed to our care, who were called to be examined as to their physical qualifications for military service, revealed numerous attempts made to defeat the purposes of the selective draft, by malingering. The profession of medicine can ill afford to be deceived by these liars that they are, to say nothing of their cowardice. Therefore it is incumbent on us to thoroughly acquaint ourselves with all the phases of this subject that we may do our whole duty to the government, for many more men will be called to the colors and the boards of conscription will have further need of our services and advice.

It has been my own experience that fully 90 per cent. of the men examined are thoroughly honest and respond promptly and truthfully to the tests imposed.

The malingerer may appear before a physician prior to the date set for his official examination to procure an affidavit alleging disability sufficient to disqualify him from service, which he will take to the board of conscription. I may state right here that any doctor is very foolish to give such a paper, for it has no standing there, and if the board finds the allegations to be untrue, the doctor giving the certificate is placed immediately under the suspicion of having given a biased certificate and for a fee, and in these strenuous times criticism is more rife than in times of peace.

It has been alleged that physicians have coached certain conscripted men in the art of malingering, compounding a crime as it were, to defeat the purposes of the selective draft. Shame on such unworthy members of a learned profession. It has been further alleged that certain members of our profession have instilled drops in the eyes of such men to produce cycloplegia and thus reduce their vision below the required standards. Both frauds are so easily detectable that physicians guilty of such practices should be cited before their respective boards of medical examination and registration

* Read before the Annual Session of the Indiana State Medical Association at Evansville, Sept. 26, 1917.

for revocation of their licenses to practice medicine.

It may be noted in passing that at times the possessor of real defects of vision and hearing may malingering in order to enter the service. We are informed that in our own state one young man while waiting his turn for examination memorized the letters of the exposed test card, and when examined repeated from memory the letters when his blind eye was exposed. His zeal is to be commended though his methods are to be condemned, for such a one is dangerous to be in the service, both to himself and to his comrades. Hence, it is best to have the examination of the eyes and ears conducted in a room apart from the room in which the general examination is being held.

Then there is the type of the malingerer who fails to lie enough. He claims his sight and hearing to be poor, but we are sure from his general attitude that he is lying. However, as he manifests enough vision and hearing to qualify him for service we pass him in and he wonders how it all came about.

Malingering is not confined to attempts to escape army and navy service, for persons may malingering to claim damages not their due, or to procure pensions of an amount unwarranted, or children to escape school attendance. In the latter class preparations for an operation have cured many such cases.

We may now start with this general proposition: The malingerer is a liar, and as such, is possessed with all the limitations that the liar has. His feigned disability, as a rule, is easily detected. It may take some time, however.

The general principle involved is to make the examinee see and hear against his or her own will. These tests fall under two heads: (a) Objective; i. e., what the examiner sees and hears. (b) Subjective; i. e., what the examinee sees and hears.

As these examinations are conducted by general practitioners in localities where the services of competent oculists are not available, we are compelled to deal with much elementary matter. In conducting such examinations we must first understand the requirements necessary for military service. The recruit must have at least 20/40 vision in one eye and 20/100 vision in the other, provided no organic disease exists.

His hearing must be 10/20 of normal.

THE EXAMINATION OF THE EYES

The conscript is seated twenty feet from the Snellen test card. One eye is covered with a card; not the hand. He is asked to read the

letters from the top of the card down as far as he can, and the result obtained is recorded on the blank in the form of a fraction. The numerator is always 20, the distance in feet from the test card to the one under examination. The denominator is determined by the size of the last letter read; i. e., 20/30, 20/40, or 20/50, as the case may be. While 90 per cent. respond readily, it is interesting to note the hesitancy of the malingerer, and how easy it is to make him see letters in the line below the last one that he says he can read plainly. I use a chart which at the side has the lines numbered with figures of the size of the 50 foot line. He may begin to read the 200 foot line and repeat the figure or ask if he shall repeat the figures. That already determines that his vision is 20/50ths. He may stop at the 50-foot line, but urging him on because he saw the other figures so well we persuade him to read the next line, which as it were, pushes him into the service unconsciously, or if he discovers his fatal error it is too late, or the same result may be obtained by the shifting of weak lenses before the eye. Usually they do not discover the error committed. Then the other eye is similarly tested.

If in spite of these ruses the vision remains reduced below the above standards, we must test each eye at 10 feet first and then at 40 feet. If the conscript has a real defect the fractions obtained will be constant; if a malingerer the fractions will not be constant, as a rule.

By using the illiterate test type with a mirror so placed that when he is turned around to read the test type in the mirror instead of direct as he did, the apparent distance is trebled, we have another way of detection of which the examinee is unaware.

Moreover, if the vision is below standard we must examine the conjunctiva for trachoma, the lids for ptosis, blepharitis, ectropion and entropion; the lacrimal apparatus for epiphora; the eye balls for exophthalmos, strabismus, nystagmus and asthenopia.

Artificially produced conjunctivitis is to be looked for, for abroad we read of ipecac powder put into the conjunctival sac to produce conjunctivitis. In this country similar effects have been produced by silver nitrate, copper sulphate and pepper. Atropia has been used as mentioned previously. Oblique focal illumination will reveal the condition of the cornea. The ophthalmoscope also must be used to determine if organic lesions exist in the fundi.

Suppose the conscript feigns total blindness in one eye. We have two valuable objective tests: the position of the visual axes and the

pupillary reaction. If one eye turns outward and upward it is pretty good evidence that the eye is amblyopic and vice versa. The pupillary reaction depends on the fact that in the dark the pupil dilates while in the bright light it contracts. The reflex arc is the optic nerve for the afferent nerve, and the third nerve for the efferent nerve. The examinee is placed before a well-lighted window and the examiner covers both eyes with his hands, cautioning the examinee to look into the distance, and after a few seconds removes them to observe the pupillary reaction. If the pupils promptly contract there is sight present. Then the alleged blind eye is uncovered while the good eye is covered. If the pupil promptly contracts there is sight and the more prompt the reaction the better the vision. If course, there will be no reaction if synchiae are present. The same is true of paralytic mydriasis.

The consensual reaction is also to be noted, i. e., the behavior of the other pupil when one only is uncovered, the other remaining covered, for with vision in one eye uncovered reacting to the light there should be a similar reaction in the uncovered eye. In every instance avoid touching the patient's face.

The ability of the patient to converge is also to be noted, as well as his power of accommodation. The behavior of the eye under a prism of 6 degrees placed base out is interesting. To secure binocular vision the eye will turn in and vice versa.

There are a large number of subjective tests used to detect malingering, and it behooves the examiner to be acquainted with all of them in order to not to run the same test for all, as shrewd malingerers are liable to trade information and thus make it easy for subsequent ones to malingering easily, or to make them the harder to detect. In all these tests the examiner must sit directly in front of the examinee or on the side of the alleged blind eye, and to keep the gaze on it at all times, for the malingerer may attempt to close the alleged blind eye and thus defeat the test for malingering. On several occasions I detected that trick and used the incident to brow beat the examinee into confession of trickery and to secure eyesight in an eye claimed to be blind.

The principal tests are as follows:

Duane's test: Place on a white piece of paper some letters alternately in red and black. Place over the good eye a red piece of glass and ask the examinee to read. If he reads all, he sees with the alleged blind eye. For if he were

really blind in the other eye he would read only the black letters.

Snellen's test: In a frame is placed alternately red and green glass of such density that when one piece of it is placed over the other no light is transmitted. On these pieces are blocked off the well-known Snellen letters for distance vision, and as on the test card. Before the examinee's eyes is put a pair of specs, in one cell of which is a piece of red glass and in the other a piece of green glass, and he is asked to read the letters from left to right. If he reads all he is not blind at all. His acuity of vision is also determined. This frame must be exposed only in testing the vision. If he is really blind in one eye he will see only the letters of one color.

Cuignet's test: Cause the examinee to read aloud some matter as in a newspaper, and while thus engaged place a lead pencil between the paper and the examinee, holding the pencil vertically. If he reads unhesitatingly he is not blind in one eye. If he has a blind eye he will have trouble reading consecutively. A modification of this test is the Javal-Cuignet shoe box test.

Cuignet's test with a lighted candle: Hold a lighted candle in front of the examinee's good eye and slowly move it across the face in front of the alleged blind eye. If he says he still sees it he lies, for the nose would prevent him seeing it, provided the alleged blind eye were really so.

Graefe-Baudry test: Take precaution that you are concerned with the good eye only, slyly covering the alleged blind eye with your hand. Place over the good eye a prism of 18 prism diopters, base up in such a position that monocular diplopia is produced, and which the examinee acknowledges. Now slowly slide the base up until it has crossed the pupil, in the meantime uncovering the alleged blind eye. If the examinee says he sees two lights ahead he lies as to the condition of his alleged blind eye.

Duane's test for close vision: Have the examinee read out loud fairly rapidly, and when thus engaged slip a prism of four prism diopters base up before the alleged blind eye. If he reads with confusion and hesitates he sees with the alleged blind eye.

Rendering the examinee artificially myopic: Place before the good eye a six diopter lens. Print can only be read with that eye at 17 c.m. At this distance hold some test type and ask him to read; while doing so, slowly withdraw the printed matter. If he still reads he reads

with the alleged blind eye. Harlan's test is but a modification of this, for he uses a 20 diopter lens, convex or concave before the good eye.

Jackson's test: Place before the good eye two strong cylindrical lenses, one convex and the other concave so that they neutralize each other. Have the examinee read, and while thus engaged turn the cylinders so that they are crossed. If he still reads he reads with the alleged blind eye.

Todd's test: Place before the good eye a black disk with a pin hole in the center. The examinee is asked to read aloud the test letters of Snellen across the room. While reading thus, the examiner gradually tilts the head upward until the line of vision is thrown below the hole in the disk, and the letters are no longer visible with that eye. If he still reads the letters he reads with the alleged blind eye.

Todd's test with the Worth amblyoscope: The amblyoscope is set so that the objects placed in the distal ends of the tubes appear crossed, as the bird and cage. It is then locked in this position and carelessly laid on the table of the examiner. The instrument is placed before the eyes of the examinee and he is asked what he sees. Suppose the right eye is the alleged blind eye, and with the left eye he sees the cage that is in the right tube, he lies and the truth is not in him.

The 6 or 8 diopter cylinder: Make some vertical lines on a piece of paper; place before the good eye a 6 diopter cylinder axis vertical, and hold the lines 3 feet from the examinee's eyes and ask him to count the lines. If he succeeds he sees with the alleged blind eye.

The double prism: Place before the good eye a double prism horizontally. If he says that he sees three lights ahead while looking at a candle he sees with the alleged blind eye. If he says he cannot see the two lights he lies.

Fridenburg's test: The principle of the apparatus is to reflect into a mirror into which the examinee looks test type of the illiterate; these being placed on each side of the patient's face in the frame's racks. The mirror is placed before one eye, and being pivoted, can be revolved or tilted so that he cannot tell which eye is being tested. The mirror can then be swung before the other eye.

Harman's diaphragm test: While this instrument was not invented for this purpose it is valuable nevertheless for the detection of malingering. It is the reverse of the bar reading test. Instead of the bar the examinee negotiates a screen in which there is a hole. Through this

he looks at the test card naturally, not suspecting the test of vision to which he is being subjected. If he is able to read all the letters, he sees with both eyes.

Priestly Smith and Edward Jackson test: Place before the alleged blind eye a 6 degree prism base out, while the examinee is fixing his vision on a light ahead. To secure binocular vision the eye will turn in if it is a seeing eye. It will turn out again when the prism is removed.

Jackson's test: Place before the good eye a prism of six prism diopters, base out. The eye will move in and the blind eye will move in the same direction, and to the same extent. If binocular vision exists the other eye will not move at all.

Berthold's test: Take a prism of 20 prism diopters and hold it before the alleged blind eye while the examinee is reading aloud small printed matter. If good vision exists in the eye it will be very difficult to do this.

Nettleship's test: Place in the good eye of the examinee a drop of a 1 per cent. solution of atropia sulphate and bandage the eyes for one hour, after which place in his hands some small printed matter and removing the bandage ask him to read. If he succeeds he reads with the alleged blind eye.

PRETENDED TOTAL BLINDNESS

Schmidt-Rimpler test: Ask the examinee to put his hand before his face and to look at it. The really blind knowing its position in space readily does it and without hesitation. The malingerer will hesitate and look in a different direction for it.

Van Welz's test: In a darkened room place a candle in front of the examinee in such a way that he will naturally look in its direction. Place a prism base out before one eye. If vision exists the eye will turn in, and vice versa.

The examiner may go to one side of the room interposing a barrier as he goes. Then ask the examinee to approach him. If he avoids the barrier, he sees it. Care must be taken to avoid accidents with the really blind.

In a hospital under close scrutiny, bandage both eyes. If he sees he will reveal his true state very soon, as it is very irksome to be blind-folded very long thus.

The reaction of the pupils is to be observed as before noted. It may give us a clue to the quantity of vision present.

The really totally blind have a peculiar gait, the expressionless face, the upturned eyes.

THE EAR TESTS

It is expected that the ordinary conversational voice will be used in making these tests that determine a recruit's fitness for service. It ought to be heard at a distance of 20 feet. The record is made in the form of a fraction. Its denominator is always 20. The numerator is the distance at which the voice is heard. One ear at a time is tested, the other being tightly closed by pressing the tragus into the external auditory canal, with the index finger. The examinee stands with the open ear towards the surgeon. He is commanded to close his eyes. The test is begun a short distance from him and he is asked to repeat whatever is said to him. We usually use numbers. He may hear perfectly up to say 12 feet and refuse to hear anything more. Now step quietly back to the full 20 feet and ask in a low voice, "can you hear me now?" Very many respond "No I cannot hear you, doctor." Of course we say to the clerk "Mark him normal," for he has *malingered*.

At one place in our state the examiner lined up a number and stepping the full 20 feet asked all who could not hear him to step out of line. Four did so, exposing themselves to the charge of *malingering*. In an adjoining county the examiner was much perplexed by one attempting to deceive him and happened to remember that he owed the examinee a \$5 bill. Stepping back the full 20 feet, said in a voice just above a whisper, "Come around tonight and I will give you that five I have owed you for some time." To his uttermost surprise he responded "All right, I'll be there." Such devices while not strictly scientific are otherwise to be commended because they save a lot of valuable time.

The tests usually used are as follows:

The Weber test: If a tuning fork in vibration is placed on the vertex of the examinee it will be heard best in the deaf ear. The *malingerer* will claim that he hears it best in the good ear. Now stop the good ear with the finger and he will say that he does not hear it at all. Of course he lies, for he should now hear it best in the otherwise good ear.

Kerrison test: In a patient who claimed to be deaf in one ear by injury, the drum head appeared normal. He assumed a degree of deafness which could only have come from injury to the labyrinth. The caloric test was applied to the alleged deaf ear and the result was positive. The response was quick and normal in every respect, and in the confusion ensuing on the vertigo it was very evident that the unilateral deafness was assumed.

The noise apparatus of Bárány: This is one

of the best of the recent tests. It is applied as follows: The examinee is asked to read aloud. While thus engaged the noise apparatus is placed in the good ear and the noise started. If the examinee is really deaf, he will raise his voice and sometimes these subjects will fairly shout in order to hear themselves read. If the voice is not raised there is no deafness in the alleged deaf ear.

The confusion test: Take two rubber tubes and on one end of each place a funnel; the free ends are inserted into each ear, one in each; have two persons read aloud one into each funnel, but read dissimilarly, and ask the examinee to repeat what he hears. If hearing exists in both ears this is very difficult.

Chimani's observations: He recommends repeated tests with the *acoumeter* and *metronome*. If slight differences exist in the different examinations, the person is probably telling the truth. Wide variations indicate *malingering*.

Erhard's test: This is based on the fact that the normal ear even when tightly closed will hear the tick of a loud watch. The alleged deaf ear is closed. The loud ticking watch is approached to a distance of three meters. The examinee counts the ticks. The normal ear is now closed and the deaf ear is examined at a meter distance. If he says he cannot hear the watch he is *malingering*.

Wagner's test: This is the most recent test and comes from Chicago. The sound of a tuning fork is received in a funnel from which runs a tube to a bifurcation and from the latter run two tubes on the ends of which are funnels meant to cover the ears of the examinee. The total length of the apparatus is 6 to 7 feet. To conduct the test, both ears are covered with the funnels and the examiner and his assistant stand behind the examinee; each have in their hands tuning forks of the same pitch (C2). Both are sounded at the same time and one is placed on his vertex while the other is placed in the funnel. Sound is thus transmitted both by air and bone conduction. Repeat two or three times. Then the examiner places his tuning fork which is now still on the vertex of the examinee while at the same time the assistant places the sounding tuning fork within the funnel. The tube leading to the good ear is pinched shut and if the examinee says he hears the tuning fork still, he is a liar.

With these tests the surgeon will be able to easily detect the *malingerer* in the very large majority of cases. There are a few who will for a time baffle the surgeon. They will require frequent observations before the truth is arrived at but it will ultimately come to light.

THE WASSERMANN REACTION

THE NECESSITY FOR A CLEARER UNDERSTANDING
OF ITS SIGNIFICANCE AND
FALLACIES

B. W. RHAMY, M.D.

FORT WAYNE

At the present time the Wassermann test is given by some men an exaggerated value and by others is looked upon with extreme skepticism. Between these extremes there is a happy medium that is at present attained by some and is the "consummation devoutly to be desired for all."

Three things are to blame for this wide variation of opinion: first, that many serologists have their individual pet methods (so-called improved methods) of performing the test and of reporting their findings; second, many clinicians are not as familiar as they should be with the significance of the reports they get, and third, there are too many "half baked" or embryo serologists whose unreliable work can do nothing but confuse the clinician and work harm for the patient.

To correct the first fault the writer believes most profoundly that there should be a standardized method for making and reporting Wassermann tests, so that the country over any given serologist's report would (or should) mean to the clinician exactly the same as any other serologist's report on the same serum when taken at the same time. As examples of this fault, in a recent number of the *Journal of Infectious Diseases* there appeared a "Comparative study of Wassermann tests performed by six different methods on identical specimens," and which showed widely divergent results. As another example, a laboratory worker looking at some Wassermann tests that the writer had made, one of which was called a doubtful reaction, exclaimed "Dr. so and so would call that positive, at least one plus (+)"; and so it goes, often the results varying according to the antigen used, etc.

The writer believes most thoroughly in the old fashioned Wassermann test, i. e., four drops of *inactivated* patient's serum with positive and negative controls, but using either the sheep or human hemolytic system and preferably the latter because patient's serum may contain natural antish sheep amboceptor while it will never contain antihuman amboceptor; incubation for one and two hours and reporting as negative (0), doubtful (\pm), one plus (+), two plus

(++), etc. The writer believes that more than one antigen should be used in each test, say alcohol extract with cholesterin antigen, or acetone insoluble antigen with cholesterin antigen, and explaining to the clinician the significance of each.

Another very important feature of the test is the titration of both complement and amboceptor. This should be done in each series of tests instead of using fixed quantities of either. Among the reasons for this is the wide variation in the complement content of guinea-pig's serum; and, as has been found by the writer in working with stabilized complement, because of a hitherto unrecognized factor, namely, the very large variation of resistance that different samples of blood cells have to hemolytic amboceptor.

As for improving the test the following improvements are not objectionable: Whether sheep or human cells are used they can be preserved by the method of Reimann (*Journal Laboratory and Clinical Medicine*, December, 1916). Amboceptor is now stabilized by camphor, and complement can be preserved and stabilized by the writer's method (*Journal A. M. A.*, Sept. 22, 1917). Fortunately, the importance of standardizing serologic methods is being realized and committees are being appointed in different sections of the country to evolve a standard method. The classic Wassermann reaction is now recognized by the best men as one of the most valuable diagnostic aids in medicine, and has even now brought out the etiology of several important diseases whose cause was before unknown.

As to the third fault, clinicians should recognize that coming from a reliable serologist, a positive Wassermann, two plus (++) or stronger, can be considered conclusive evidence of syphilis. In the early days of the Wassermann, unskilled workers found positive reactions in all sorts of non-syphilitic lesions, but at the present time, with the exception perhaps of leprosy, positive reactions are *not found* in non-luetic diseases unless a luetic infection, perhaps quiescent, exists as a complication. Here a note of warning may be sounded, namely, "the finding of a positive Wassermann does not always mean that all the symptoms are due to syphilis." There may be coexisting disease and other treatment may be necessary. As for a one plus (+) reaction, this must be considered as a weak or slight positive reaction and must be associated with the clinical history by the clinician in drawing conclusions. If the clinical

history is suspicious it make syphilitic infection strongly probable, but is not sufficient of itself to make the diagnosis. A doubtful reaction in a suspicious case indicates the propriety of repeating the test, with or without a "provocative salvarsan injection." In known cases it indicates further treatment. On the other hand, even the best workers sometimes get negative reactions in cases of syphilis. This may be the result of recent treatment, but is principally due to the fact that from purely physiologic reasons there is at times temporary disappearance of the reaction in the blood of syphilitics. With what frequency this occurs and in what percentage of persons is not known, but the fact remains and all attempts to improve the delicacy of the Wassermann reaction have been aimed at getting positive reactions in these bloods, which physiologically are unable to react. In nerve lues, where the blood is negative, a positive reaction may be found in the spinal fluid. The injection of a small dose of salvarsan may by physiologic reaction "provoke" in the blood the positive Wassermann that should obtain. With correct technic the Wassermann two weeks or more after the appearance of the chancre should be positive in 90 per cent. of all cases, in the second stage about 94 per cent., and in the tertiary stage about 87 per cent. In using the Wassermann test as a control of treatment, clinicians should remember to omit treatment for one or more weeks before taking the blood.

The above comments are on the results obtained by using alcoholic or acetone insoluble antigens. The reason cholesterin antigens should be used (as above advised) in conjunction with one of these other antigens is that they are about 10 per cent. more sensitive in detecting syphilitic antibodies and, therefore, although the cholesterin antigen may give a certain number of reactions in non-specific cases it is clearly better to test all serums with both kinds of antigen. In estimating the reaction from the clinician's standpoint, a doubtful or one plus reaction in a suspicious case could be called positive if a strong or moderately strong reaction occurred with cholesterin antigen. The cholesterin antigen nearly always shows a stronger reaction than the other antigens. Rarely there occurs what is known as "Wassermann paradoxus," in which the cholesterin antigen reaction is weakest. It has been found that this reaction comes from patients displaying manifestations of motor unrest, such as spasms, tics, convulsions, fainting spells, idiopathic epilepsy, etc. It is said that the extreme of this reaction, i. e., positive with alcoholic antigen and

negative with cholesterin antigen, does not mean syphilis.

As to cure, although we have no absolute means of estimating a complete cure; from the clinical standpoint there should be complete absence of symptoms, and from the laboratory standpoint the patient without treatment should give three or four consecutive negative Wassermann tests four to six months apart, before he may be discharged or given leave to marry. Finally, as Gradwohl says, "To those who insist upon proof of complete cure it must be conceded for the sake of argument that the sword of Damocles may always hang suspended over the heads of some individuals who have been infected," but we do maintain that many pronounced cured by the above dictum are really cured, although it may take another generation to prove it.

WHOLESOMENESS AND ECONOMY

The nation is at war. To protect our rights we must have an efficient fighting machine. The men must be given wholesome and nutritious food in sufficient quantity. The stupendous character of the conflict necessitates rigid economy of both men and material. Nothing is economy that renders food less wholesome, but there is no excuse for catering to prejudice at an increased cost. We shall need all our dollars before this war is over. We must secure for our soldiers the most wholesome food at the least cost.

Our governmental departments are subject to criticism by the whole country, and it would not be surprising if they catered to known prejudices in order to avoid annoying criticism. But in time of war we must be governed by scientific facts and not by prejudice. Big interests whose advantage lies in the support of a prejudice may criticize, but our leaders must be big enough to practice economy in spite of such unjust criticism. That economy will be practiced and that scientific facts and not prejudice will guide the government in the selection of wholesome foods is clearly indicated by recent actions by the Department of the Interior, the Army, and the Navy. All these departments have recognized the findings of the Reference Board of Scientific Experts who found that alum baking powders were as healthful as any other baking powders. These departments have recently purchased large quantities of alum phosphate baking powders. This is the type which was furnished our soldiers on the Mexican Border and subsequently to our sailors and which proved so satisfactory. The people of the United States have recognized the wholesomeness and economy of this type of baking powder for years. Eighty per cent. of the baking powder used in the United States contains alum. Its wholesomeness is unquestioned. Its economy is marked. Not only are alum powders generally much stronger, so strong that the manufacturers recommend the use of only half the quantity called for by high priced baking powders, but the price of the powder pound for pound is but half as much. This means that the use of one pound of phosphate alum powder at 25 cents does the work of two pounds of the other powders costing one dollar. The saving is 75 cents. War prices would have no terrors if we could make an equal saving on all our foods by substituting something equally wholesome, twice as effective and at half the price.

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EDITORIALS

TYPHOID TRANSMISSION

There is no word in hygiene that has killed as many people with typhoid as the word "contagious." One of the first things asked a physician when called to see a case of typhoid is, Is it catching, contagious? To this question ninety-nine out of every 100 physicians will answer "no." The ordinary conception of contagious is the transmission of disease through the air from the sick to the well. The real question is, however, is typhoid directly and easily transmitted from the sick to the well?

The most important link in the chain of typhoid prevention is the family physician, and usually he is the weakest.

The problem of typhoid prevention is the destruction of typhoid bacilli at their exit. That means sterilization of the feces, urine, bedding, garments worn by the sick and fingers of the nurse. To effectually sterilize feces and urine they should be mixed thoroughly with equal quantities of a 4 per cent. solution of formaldehyd, or carbolic acid, and allowed to stand for two hours. The sheets, gowns and other garments used by the patient should be soaked in formaldehyd or carbolic solution before being washed. The nurse should not cook nor handle food for any one except the patient. She should prepare her hands as for a surgical operation before eating anything herself.

Every person with a slight degree of fever or intestinal disturbance should have a Widal examination made. If the Widal is positive, even though the clinical symptoms are not positive, the same precautions should be taken as to feces, urine, fingers, bedding, eating, etc., as with a typhoid case. Whenever a case of typhoid appears sporadically in a family, each person in that family should have his or her blood examined for positive Widal. Many cases of typhoid arise from chronic carriers and many of these persons give a positive Widal.

Every case of typhoid should have a trained nurse, and where that is impossible it should be isolated in a hospital. On being called to see a

case of typhoid for the first time, the family physician should put the matter of typhoid vaccination squarely before the family and refuse his services further unless vaccination of the well members is done.

Typhoid transmission is very largely a matter of personal contact with persons infected with typhoid bacilli. That explains why the typhoid rate is higher in urban districts than it is in rural districts. Milk, water and flies sometimes help to intensify a typhoid epidemic, but they are never the primary source. The typhoid infected individual is the only primary source, and the family physician must stand between his sick patient and the public, its milk, water, flies and privies. He is the one who can do the only really effective typhoid prevention work.

**OPPOSITION TO TONSILLECTOMY
AND ADENECTOMY**

One would think that in this day and age it would be difficult to find doctors having ideas and notions that are scarcely a credit to the medical profession of fifty years ago; yet we learn that there are not a few doctors who have failed to keep up with the procession and are content to follow the teaching of a decade ago. It is acknowledged that some of the teaching of fifty or a hundred years ago is just as apropos now as it was then, but that is not the case with all teaching, and if it were we still would be treating diphtheria by the old methods with the attending high death rate as compared to the almost negative death rate of the present day. But this complaint is stimulated by the knowledge that not a few doctors, most of them past middle age and having considerable influence in their respective communities, are vigorously opposing the removal of adenoid tissue and hypertrophied tonsils from the throats of children. They not only are opposing the advice given by men of more training and even more experience than they have had, thus lending to the general accusation that doctors never agree, but are religiously disseminating the knowledge to the public. It is difficult to understand the kind of logic which prompts an opinion that experience and results have disproved, as it also is difficult to understand why any doctor will cling to theories or practices that experience and investigation have proved to be detrimental. Thousands on thousands of children suffering from disturbed breathing, ear troubles, bronchitis, impaired mentality, or one or more of many other disturbances of the comfort and

health of the patient, have been entirely relieved and in every way made 100 per cent. better by the removal of adenoid tissue and enlarged tonsils. At the present time it is an established fact that adults suffer from various toxic disturbances which can be directly traced to diseased tonsils. Many papers bearing on the relationship of diseased tonsils to the production of rheumatism and heart lesions, have been published, and quite recently¹ Dr. William Ophüls of San Francisco has called attention to many cases of chronic nephritis seemingly due to chronic suppurative tonsillitis, or in other words, the type of tonsils which are not sore enough to give the patient very much annoyance but are a means of furnishing infection that is absorbed and has its toxic effect on the kidneys as well as some other organs of the body. In the light of many investigations and the results secured from tonsillectomies in the hands of physicians qualified to do the work in the proper manner, it seems folly for any members of the medical profession to oppose on general principles the removal of adenoid tissue and tonsils in the child or the removal of diseased tonsils in the adult. We recognize the fact that some men recommend the removal of tonsils in the adult when a careful examination fails to produce any evidence that the tonsils are at fault. Likewise we recognize the fact that there is a whole lot of bad tonsil surgery being done on both children and adults by men having little training and little experience for that kind of surgical work, but these facts do not justify any one in condemning adenectomy and tonsillectomy in a great army of patients, both young and middle-aged, who are suffering from the effects of tonsillar infection and who can be very greatly relieved by appropriate surgical procedures. It is time for a lot of doctors to wake up and join the procession of progressive men who are intelligently and conscientiously relieving their patients by measures which a few years ago were not even thought of as being worthy of attention.

THE SIGNIFICANCE OF THE WIDAL REACTION

When one is called to see a patient with a continuous fever the question is, What is it? After carefully weighing the subjective and objective symptoms and history of the case, the decision may still be doubtful. Blood is then

taken for a Widal reaction. If the blood gives a positive test the diagnosis is still not absolutely positive, for the patient may have been vaccinated recently, or be a chronic typhoid bacilli carrier, or there may have been some slip in the laboratory man's technic. If the Widal is positive and the symptoms continue atypical of typhoid, or the patient has been recently vaccinated, other specimens of blood should be tested to see if the agglutinating power of the blood is increasing. The medical department of the English army recently has adopted a standard method for doing Widals, so that an increase of the agglutinating power of the blood can be accurately obtained.

If the Widal is negative it is still not certain that the patient does not have typhoid, for the resistance of the patient may not be sufficient yet to produce agglutination in the blood against typhoid bacilli, or the dilution used by the bacteriologist may have been too high. If the patient continues to have symptoms of typhoid it is well to send in specimens of blood each week until the patient has recovered. In some cases of typhoid a positive Widal has not been obtained until the third or fourth week of convalescence.

A correct diagnosis can seldom be made on one single factor. All factors must be weighed and each given its proper weight in the whole. A proper diagnosis depends on an innate diagnostic sense, that is, the ability to find one's way among a bewildering array of evidence to aid us in arriving at a decision. A man to be a good diagnostician must not only know how to do laboratory work, but he must also be able to interpret laboratory findings and to correlate them with the clinical data.

SANITATION AT FORT BENJAMIN HARRISON

At this time the number of men in camp at Fort Benjamin Harrison at Indianapolis, varies from 15,000 to 17,000. The daily arrivals and departures, especially departures, we are told, will increase in October and November. It might be thought that this shifting of members would present difficult problems in feeding and sanitation, but it is said this is not the case.

The buildings of the fort proper are all of brick, with cement and stone foundations, roads are rolled gravel, sidewalks cement, and lawns, flowers, ornamental shrubbery and trees abound. The water supply from the fort's private

1. Jour. Am. Med. Assn., Oct. 13, 1917.

waterworks meets every test, and the sewage is disposed of through sewers and destroyed in septic tanks of ample size. The army engineers look after these matters with a thoroughness not equaled by city or town authorities. The garbage disposal passes inspection with flying colors. The heating, ventilation and cleanliness of the barracks are up to the standard. Neatness is the order of the fort. Trash is nonexistent. Horse droppings are removed immediately, and paper scraps of all kinds from whole newspapers down to the smallest pieces are never seen except perhaps in the afternoon, and these are spread by civilian visitors. In these days soldiers are taught neatness and cleanliness and the teachings are enforced.

It will be noted that all of these statements refer to the brick and stone or permanent buildings of the fort, but they apply equally well to the cantonments and tents, which number above a thousand, with only slight exceptions. Cleanliness and neatness are universal. A visitor, and a doctor by the way, threw an apple core on the ground in front of a soldier's tent. Immediately the soldier nearest picked up the core and dropped it into a garbage and trash can nearby. Among the cantonments, which are long frame buildings, well lighted and ventilated, are built separate frame houses which are lavatories with water closets. The floors of these "toilets" are cement, with bell-trap connections to sewers so they may be cleaned by flushing with hose water. The urinals are strong galvanized iron troughs, and the hoppers or stools are the same as are found in first-class houses. There are shower baths only, which are certainly more sanitary than tubs. These "toilet-houses" are heated and supplied with hot water.

The men who live in tents are only temporarily provided for, and will move into frame cantonments which are under construction. The tents are sanitary. The cleanliness, neatness and orderliness could not be better. The tent soldiers are provided with latrines, which are sometimes canvas and sometimes frame. In them excreta disposal is by the earth closet system. There are no pits or vaults. The latrines are scrupulously cleaned and almost free from odor and flies, which can hardly be said for four fifths of the Indiana hotel water closets. The earth boxes or drawers are emptied, "limed and earthed" daily. Flies are not entirely absent, but are as scarce as in most Indiana hotels and restaurants.

We may sum up by saying positively that the sanitation is A-1 for the permanent buildings at

Fort Benjamin Harrison, and the sanitation of the cantonments and tents is at least A.

The food and cooking, except in a few messes, passes inspection. It may be said that vegetables and fruits are short in the final sum-up of the diet. In the first four weeks of the camp the food was more or less criticized by the men, but better order and method soon prevailed and complaints became almost nil. Only a few messes miss having meat every meal. Perhaps too much meat on the whole is eaten. The meat is always good, for it must pass careful inspection. "It is pretty damned tough sometimes," said a soldier, "but it's never tainted and we feel sure the animals weren't sick when they were slaughtered." When the camp was first opened and for perhaps a month or six weeks after, the diet was mostly meat, bread, coffee and potatoes. Vegetables and fruits were almost unknown. Of course, constipation and biliousness appeared. A soldier eating his dinner from a regulation tin-pan outfit was asked if his dinner was good and if the "chew" was generally good. He said: "Yes, we feed well. Here is roast beef, gravy, boiled potatoes, rice, bread and coffee. The gravy has lots of black pepper in it and that's the way I like it." "Are you constipated?" was asked. "Sure, we are most of us constipated, but we get pills and salts for that. Everybody is constipated these days. I know, for just look at the advertisements, and in the drug stores two out of three buy cathartic pills." We found we had struck an observing man, and so we suggested that it would be better if his diet were better balanced and if his bowels moved naturally. He agreed that more vegetable and fruits were desirable. Two other soldiers, one very intelligent, complained much concerning the food. "For supper last night," said one, "we had one underboiled potato, hominy, bread and gravy with tea. For breakfast we had oatmeal, no milk or sugar, one little sausage, bread and coffee." Here, again, vegetables and fruits were absent, and inquiries discovered constipation, and the tongues of the two, which were readily shown, were coated.

At the present time vegetables and fruits are served in good quantity. In the Medical Reserve Camp the food is now good. "No kick coming" is the almost certain reply in regard to the matter. The breakfast for the medics the morning of October 10 was scrambled eggs, bacon, oatmeal and canned milk, bananas, bread and creamery butter, and coffee with milk and sugar. Officers pay for their own food and mess expense. Enlisted soldiers are allowed 51 cents each per day, and the mess sergeant must keep

the cost within this sum. Sometimes the living is too high for a few days, and then there must be retrenchment until the financial equilibrium is established.

On the whole, the food and the sanitation is excellent, and we can say with safety that Uncle Sam is zealously guarding the health of his soldier boys.

ANNUAL CONVENTION OF THE AMERICAN ASSOCIATION OF MILITARY SURGEONS

One of the important medical meetings of the year was the 25th annual convention of the American Association of Military Surgeons, at Ft. Benjamin Harrison last month. Men distinguished in military service representing the armies of England, France and United States were in attendance at the three days' session. The hosts for the meeting were Colonel Percy M. Ashburn, commanding the Ft. Harrison medical training camp, and the officers under his command.

George A. Lung, medical director of the U. S. Navy, was elected president of the Association; Henry Allers, of the Medical Department of the New Jersey National Guard, was elected first vice-president; Brigadier General Henry P. Birmingham, of the National Guard, second vice-president; Assistant Surgeon-General J. S. Kerr, of U. S. Public Health Service, third vice-president; Colonel Edward Munson, of the Medical Department of the Army, secretary; and Assistant Surgeon-General W. Colby Rucker, U. S. Public Health Service, treasurer. This was Colonel Munson's third return to the secretaryship.

Colonel T. H. Goodwin, of England's Royal Medical Corps, Captain J. Gilmour, also of the British Medical Service, represented England, and Colonel Charles Dircle and Major Eduard Rist were famous surgeons from the French service. Colonel Goodwin was one of the first British surgeons to cross the English Channel and engage in halting the onrushing Germans in 1914, being in the first 50,000 sent across. Colonel Dircle has seen service at points of bitterest fighting on the western front, and it is a matter of record that he bears the marks of ninety-six wounds received while in the service of his country. The distinguished foreigners received a hearty welcome when they passed through long files of officers in training at the post. The officers stood at attention and then applauded vigorously when, with distinguished American surgeons, they took their places on

the stage at the opening meeting. Rear Admiral William C. Braisted, Chief Surgeon of the Navy; Major General William C. Gorgas, Surgeon General; Colonel A. H. Briggs of Buffalo, a charter member of the Association; Major General Rupert Blue, Chief of the U. S. Public Health Service; Major Victor C. Vaughan, until recently the medical member of the Council of National Defense; Colonel Henry Page, commanding the medical camp at Ft. Oglethorpe, Ga.; Colonel Elbert E. Persons, commanding the Allentown (Pa.) medical camp; Colonel C. E. Brigham, commanding the Des Moines (Ia.) camp; Colonel William N. Bispham, commanding the Ft. Riley camp, and Colonel William Stephenson, Chief Surgeon of the Central Department of the U. S. Army, were among the noted American surgeons attending the convention. A smoker was given as a get-together feature, but the main entertainment was provided by a monster barbecue.

The honored visitors and 2,000 officers of the medical training camp sat down at long rows of roughly made tables piled high with food. In addition to the small mountain of barbecued meats there was celery, pickles, doughnuts, pumpkin pies, and a score of other palatable pleasures. Each man had his mess kit with him and in single file the army marched along the serving table. While they ate, the big logs of a score of camp fires blazed cheerily. Elaborate field maneuvers comprised part of the program arranged for the visitors. These maneuvers consisted of showing how the wounded are assisted and cared for on the battlefield. Motor ambulances and mule ambulances dashed across the field loaded with men, while doctors on horseback directed them. At another time the entire medical outfit at Ft. Harrison passed in review, the parade including not only the medical officers of the big training camp, but all of the ambulances, field hospital, evacuation hospital and base hospital.

Colonel T. H. Goodwin made one of the important addresses of the convention, discussing the war situation as it confronts the military surgeons of the United States, and urged the doctors to make every preparation for long service. Another important address was made by Surgeon William S. Bainbridge of the U. S. Navy, who spent several months in Germany following the outbreak of the war. Dr. Bainbridge visited forty-one German hospitals during his stay there and described the constant surveillance under which he was held. He was compelled by German officers to remove the initial letters from his shirts and also had to

remove the trademark from his American-made cap, so fearful were the Germans that it might convey some enemy message.

"Don't be deceived into believing that the warp and woof of the German people is not behind the Kaiser in this world war," said Dr. Bainbridge. "This spirit of warfare has been taught from the cradle up and the German people believe, to the very depths of their souls, that naught but victory can come from this conflict. The German people believe they are right," he continued, "and the American army must prove to them that peace is more beautiful than the warfare they have been taught since childhood to believe their divine right to inflict on the rest of the world."

Dr. Bainbridge caused his hearers to shudder when he pictured conditions in the German prison camps where thousands of Belgian, French and British prisoners are compelled to live in hovels, and partake of food unfit for the lowest animals.

A new association of military doctors was organized, composed of examining surgeons attached to the U. S. Medical Reserve Corps. The new organization is to be styled Association of Presidents of Examining Boards and Medical Reserve Corps. The purpose of the society is to standardize the work of medical examiners and to promote the efficiency of the boards.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

DON'T, for heaven's and for United States' sake, put an American (U. S.) flag on your automobile if you have not at least one Liberty Loan Bond. If able to buy a car, able to buy a Liberty Loan Bond! Soldiers' Safety First! Remember our boys!—*Titus County (Texas) Bulletin.*

COUNTY medical society secretaries are reminded that in sending dues for the members of their respective societies the full street address of members must be furnished, as THE JOURNAL will not be accepted by the postoffice department unless complete addresses are given on the wrappers.

FROM St. Louis, always considered a hot-bed of pro-Germanism, the home of Anheuser Busch, etc., comes a report of the activities of the St. Louis Medical Society, through its Defense of the Nation Committee, in "doing their bit" to win the war. It is a well rounded program, covers practically every phase of condition that concerns the medical man and the war, and is well worth the attention and consideration of every medical society.

THE time for paying dues to the State Association has arrived. Remember that the dues are now \$4 instead of \$2 as heretofore. Pay promptly and don't wait to be urged. This is a time for conservation, and not only is the time and energy of our worthy secretary to be considered, but the expense of collecting dues as well. There should be no occasion for extra postage in urging procrastinating members to pay dues.

LIEUTENANT WHIDDEN, a member of the Medical Reserve Corps in the Harvard Base Hospital in France, who was injured when a German aviator cowardly bombed the hospital, is well known by many Indiana physicians, as Dr. Whidden was formerly located in Fort Wayne, where he first served as resident physician in Hope Hospital, and later served as an assistant to Dr. Miles F. Porter. His Indiana friends will be glad to know that he is making an uneventful recovery from wounds inflicted by the barbarism of the German aviator.

IF all reports are true, there are several cities and towns in Indiana where the disease breeding and insanitary open privy should be abolished. Despite all the preaching of health officers and medical men in general, many people continue to look on the open outside toilet as inoffensive so far as its effect on health is concerned. With the outbreak of typhoid fever they are ever ready to condemn the milk or water supply, but fail to recognize the fact that the open outside toilet and the ever-present fly is a positive factor in the dissemination of the disease.

WE are being bombarded with letters from Indiana doctors now in military service asking for change of mailing address. Our military doctors are being shifted around so much that it is hard to keep up with the changes in address, and yet we are doing our best to give every subscriber who is serving in the war his journal if his address is known. We especially desire that changes of address be furnished promptly, as we also request that in case any copies of *THE JOURNAL* are not received we be notified so that duplicate copies can be mailed.

IN the Correspondence Department of this number of *THE JOURNAL* we publish a letter from the Massachusetts General Hospital, concerning clinical diagnoses checked by autopsies, which we think worthy of such publicity. The plan followed of furnishing a complete record of cases that have been autopsied furnishes one of the best methods of teaching, and as the Massachusetts General Hospital can furnish such records it is more than probable that a large number of physicians may desire to avail themselves of the reports.

GOITER generally is considered an operative condition, but Dr. Leigh F. Watson of Chicago, in the *New York Medical Journal* of Sept. 22, 1917, reports a series of 125 cases treated by quinin and urea injections, with improvement in every case. This quinin and urea injection treatment of hyperthyroidism was first mentioned in the *Journal of the American Medical Association* of Jan. 10, 1914, and a number of cases reported in the same journal of Sept. 25, 1915. Dr. Watson arranged an exhibit on this subject, which received an award in the Scientific Section at the American Medical Association meeting in Detroit in 1916. The author is very enthusiastic over the value of this treatment, but admits that it has limitations the same as any other treatment for goiter, and can be employed only in selected cases.

MOTHERS and fathers sometimes ask physicians not to report that scarlet fever or other infectious diseases exist in their house, so that they will escape quarantine. This certainly is vicious and wrong. The physician who sacrifices his honor to save the family a slight inconvenience from quarantine by making a wrong diagnosis is a poor citizen. If he smothers or hides the case in any way he is really to be pitied for his weakness. To report a wrong diagnosis is to wilfully expose others who would

not otherwise expose themselves. It also permits the patient himself in many instances to go about needlessly spreading infection. The parent who asks a doctor to declare a wrong diagnosis, in order to be saved from slight inconvenience from quarantine is a sorry sight. It is the duty of physicians to report infectious diseases. Any doctor who fails to do so deserves to have his license revoked.

FROM France comes word from our American doctors who are in military service that they are finding about as much work of the kind that they do at home as they do in taking care of the wounded. However, in most of the military hospitals there is an abundance of military surgery. In fact, not a few of the men complain that they are distinctly overworked at times, though they find pleasure in the labor that means so much to the suffering boys from the battle lines. At present there is a movement on foot to send more American doctors to Europe in advance of the troops to help out in the great work. Incidentally it may be stated that government officials are greatly pleased over the generous response to the call for volunteers for medical military service. For a time it looked as though conscription would be necessary, but for the present at least no such drastic action will be required.

WITH reference to expenses connected with commission in the Medical Officers Reserve Corps, the surgeon-general has the following to say:

"It has been reported at this office that there is quite a bit of misunderstanding on the part of applicants for the Medical Reserve Corps as to the cost of field outfit and other expenses connected with accepting a commission in the Reserve. It is requested that you bring the following information to the attention of all candidates applying for commission in the Reserve Corps.

"One common error is that the field outfit costs not less than \$300. An officer of the Reserve may easily spend this amount of money on his outfit should he so desire, but it is entirely an unnecessary expenditure and an extravagance.

"The pay of the various grades is as follows: lieutenant, \$2,000; captain, \$2,400; major, \$3,000; plus 10 per cent for foreign service.

"It is understood that a number of medical men refuse to apply for commission in the Reserve Corps on the grounds that the mess dues and the other necessary expenses require the full salary of a first lieutenant. Such belief is absolutely incorrect. There is no reason why an officer in the field should not save the greater portion of his pay."

WE desire to correct a couple of errors which appeared in the October number of THE JOURNAL: Under the Section of Eye, Ear, Nose and Throat, in the discussions of the papers by Dr. J. D. Heitger and Dr. W. A. Hollis, mention is made of "Dr. J. H. Bridenbaugh of Columbus." This should be Dr. Oscar C. Breitenbach of Columbus. In the article on "Coagulen," by Dr. H. K. Bonn, Indianapolis, the statement is made at the bottom of the second column of the first page of the article, "Five grains of coagulen in all, whether by the intravenous or subcutaneous method, or both, is the maximum dose in adults and induces an energetic and prolonged action." The statement should read "Five grammes of coagulen in all, whether by the intravenous or subcutaneous method, or both, is the maximum dose in adults and induces an energetic and prolonged action." We regret exceedingly that these errors should have crept in.

THE osteopaths, who have proclaimed their disbelief in the value of medicine in the treatment of diseased conditions of the human body, and who presumably have founded their school of practice on the idea that every disease can be cured or alleviated by mechanical means, are now quite generally employing not only medicine but surgery in their work. The chiropractors, legally unrecognized, in large numbers are practicing medicine without let or hindrance. Even the opticians, or optometrists, as they style themselves, are giving advice concerning and attempting to treat eye diseases, and not a few of them are openly prescribing medicine. Surely our medical laws are dead letters and might as well be erased from our statute books, and our boards of medical registration and examination are worthless bodies except to harass the young doctor who has passed at least two years of college or university work, four years of medical college work, and perhaps a year in a hospital. The conditions are enough to make the angels weep!

PROFITING by the experience of the past, our army officers are taking unusual precautions to prevent our soldiers from contracting typhoid fever and intestinal diseases. An inspection of our camps shows that the most exacting sanitary rules are being followed, and the soldiers themselves are being instructed in the recognized requirements of cleanliness and sanitation in order to promote health. All drinking water and food is under careful surveillance, and danger from contamination by flies is eliminat-

ed as much as possible. To add to the protection of our soldiers anti-typhoid vaccination is universally practiced. There will, therefore, be no such morbidity reports from our army camps as came from our camps in the Spanish-American war. And this reminds us that we have not heard a word or peep from our anti-vaccination cranks who were really pests during peace times, and probably will rise up to be pests after the conclusion of the war.

MAJOR JOSEPH COLT BLOODGOOD, M. R. C., of Baltimore, in a circular letter to physicians and surgeons in industrial practice in particular, urges the cooperation of all physicians whose relations to the industries in this country have given them any experience in the problem of vocational reeducation and of finding new employment for the reeducated, handicapped industrial worker. The problem of reconstruction and reeducation of the wounded in this war is going to be one of the largest to be met by the Government, and everyone who has had any special training or experience with such work should send his credentials to the Surgeon-General's office and offer his services if he can be spared from his duties in his community. Major Edgar King, M. C., U. S. A., has been placed in charge of this work, and physicians are urged to send to either Major King or Major Bloodgood the names and addresses of any medical or nonmedical men and women who have had experience in this educational problem.

THE soaring prices of all commodities and labor of every description prompts us to remind doctors that they must, for their own protection and self-defense, charge more for their services than they did in pre-war times. Furthermore, the easy-going, unbusinesslike doctor must pay more attention to collections. These are not hard times, despite the war, for every man and every woman who wants a job can get it and at wages never received before. Likewise, every man who has any commodity to sell can and does secure a large price for it. There is no excuse for negligence on the part of anyone in the payment of bills, and the doctor should take this fact into consideration when his patrons adopt the all too common practice of paying the bill of the doctor last or not paying it at all. Prompt collections are justified as a business necessity, and greater respect is given the doctor who employs business methods, while at the same extending any leniency to those deserving any such consideration. And the doctor, who in these times of plenty

and high prices for everything, continues to do his work for fees no higher than charged five or ten years ago is doing himself an injustice and incurring the opinion on the part of the public that his fees always were too high.

THE new Federal taxes are really not so burdensome if they only represented the increased cost to the consumer. As a matter of fact the average manufacturer, and especially the retailer, makes increased taxation an excuse for boosting the price beyond reason. Any number of articles that thirty days ago sold for a really high price, and are now taxed from 2 to 5 per cent. for war purposes, are increased to the consumer by from 25 to 50 per cent. in cost all on account of the war. When one merchant was criticized because he added 25 per cent. to the price of a certain commodity that recently has been taxed but 5 per cent. by the government, and gave the excuse that the increased cost was on account of taxation, he wound up by saying that when others were doing it why shouldn't he do it. The doctor has nothing to sell but his services, and from all we can learn he is disposing of his services at the same old rate. Admitting that during normal times he may be adequately compensated, yet in these strenuous times, when the price of everything going into his professional work or his daily home life has been increased by taxation and the greediness of manufacturers and merchants, it would seem that in self-defense alone he should increase the price charged for his services.

EITHER a majority of the officers of the Medical Reserves Corps are grossly extravagant in their purchase of equipment for army service or the Government is furnishing equipment of a very poor quality. We always have understood that the Government furnished the best of everything, or at least that which through experience has proved most serviceable, but when we hear medical reserve officers stating that they have spent from \$150 to \$400 for their equipment, and then compare that with the statement issued by the Government authorities to the effect that equipment, including every actual necessity, can be purchased from the quartermaster's department at an expense not to exceed \$50, we are inclined to believe that some of the medical reserve officers are very fastidious in their tastes. We overheard one officer say that he had paid \$9.00 for a pair of regulation army shoes, whereas a report from the quartermaster's department indicates that

army shoes are furnished to officers at \$2.81 per pair. Some other statements by the officer in question concerning prices paid for his equipment indicated corresponding extravagance. It would seem that this state of affairs is nothing more than an exhibition of the all too prevailing American habit of going to the extreme, and it is not especially creditable in these strenuous times when conservation is being preached on every hand.

IT is estimated that if it were possible to secure perfectly pure milk in Indiana for one year, the profit would be the saving of about 2,000 lives. This estimate is based upon the fact that about 4,000 infants die annually of diarrheal diseases and other intestinal disorders and it is believed that 80 per cent. of these cases proceed from polluted milk. If the figures are discounted 50 per cent., still the number of deaths is very great. Even with the discount of an additional 50 per cent., the figures still are fearful. If only ten children were killed annually in Indiana by polluted milk it would be worth while to put forth strenuous efforts to secure pure milk, and save that number of lives. The Indiana law declares that milk containing visible dirt is unlawful and condemned. Any health officer finding milk in bottles, in cans or in any container whatever which contains visible dirt should seize the same, take it before the judge of the court or a justice of the peace and lay accusation against the person who sold the milk. There is no reason in the world why visible dirt should be found in milk. This visible dirt is usually small particles of manure carrying millions of putrefactive and fermentative germs. The new Indiana milk rules which go into effect Jan. 1, 1918, according to two rulings of the Supreme Court, will have all the force of law, and it will be the duty of health officers everywhere to enforce these rules.

THE Indianapolis nurses have unanimously decided to raise their rates by \$5 per week, "all on account of the war!" This reminds us that "everybody's doing it," with the exception of members of the medical profession. We have not heard of many doctors raising their fees, though they are perfectly justified in doing so. Even the foreigner who sharpens our scissors has doubled his rates, and when asked for the reason said that his emery stone was costing more than it did before the war. He evidently thought that we would not know he was using the same emery stone that he has owned for at

least the last ten years, and which will do him for another ten years. Our tobacconist up to two weeks ago charged us 90 cents for a package of our favorite smoking tobacco. The next morning after the 5 per cent. federal tax on tobacco went into effect he charged us \$1.20, and gave as his excuse that he had to charge that on account of the new war tax. If the government taxes a commodity 5 per cent., the manufacturer makes it an excuse for increasing the price about 25 per cent., and the retailer comes along with an additional 25 per cent., and the consumer pays the bill. And the worst feature of this era of high prices charged up to war conditions is that in war-stricken Europe no such extravagant and uncalled for increase in prices prevails. It seems to be a distinctly American habit to charge all that the public will stand. It is fortunate for suffering humanity that members of the medical profession are not aping everybody about them.

THE State Tuberculosis Society has appointed a Red Cross Seal War Council, composed of the following members: Dr. Joseph Rilus Eastman, president of the Indiana State Medical Association and member of the Medical Committee of the State Council of Defense; Mr. Horace Ellis, chairman of the Educational Section of the State Council of Defense and State Superintendent of Public Instruction; Mr. William Fortune of the American Red Cross; Mr. Charles Fox, president of the Indiana Federation of Labor; Dr. Alfred Henry, president of the Indiana Society for the Prevention of Tuberculosis; Dr. Wm. F. King of the State Board of Health; Mrs. E. O. Lukenbill of the Indiana Federation of Clubs, and Rev. A. B. Storms of the State Council of Defense. The purpose of this Council is to back the work of the State Tuberculosis Society — such work as getting an increase of sanatorium beds for soldiers and civilians, extending county nursing and cooperating with civilian relief workers in the care of men rejected and to be rejected by the Army on account of tuberculosis, and general educational work in regard to the prevention of tuberculosis. The first thing to be done in bringing these things about is the conducting of a successful Red Cross Christmas Seal campaign. Tuberculosis is considered essentially a medical problem, and medical men, individually and through county medical societies, must work hand in hand with the county and state tuberculosis societies. Especially this new Council should have the hearty cooperation of Indiana

physicians, and we desire to emphasize the opportunity of doctors to participate in the forthcoming Red Cross Seal campaign, thus aiding in the fight against tuberculosis generally.

JUDGING from the tone of letters and speeches by some doting mothers, a lot of sentimental rot is indulged in concerning the treatment accorded Uncle Sam's soldiers. One mother complains bitterly because her boy, now at one of the southern camps, has no sheets on his bed; another one complains because the beds are too hard; and still others offer complaints equally as nonsensical. As a matter of fact, the very boys whose doting mothers are wasting so much sentiment on, are contented and happy, to say nothing of being healthier than they ever have been in their lives. It is going to do thousands of American boys a lot of good to be placed on army regime. There will be no fancy frills to their fare or keeping, but they will have good, wholesome food, comfortable quarters and sufficient regular exercise to put them in the pink of physical condition. Then there are the good effects of training, obedience and respect for superiors, as well as respect for law and order, which so many American youths need. We shall be sorry to see any of our boys go to the battlefields of Europe, and still sorrier to learn that any of them have been slaughtered in this terrible war, but we shall never be sorry that so many thousands of our American boys have had army discipline and army training, for it will mean so much in fostering a much-needed respect for our institutions. If any doting mother believes that her boy is going to be injured by any military service that does not carry with it injury or death on the battlefield, she will do well to get that idiotic notion out of her head.

SINCE the publication of our editorial note in the October number concerning the extravagant prices paid by officers for their military equipment, our attention has been called to the fact that the Government is having its hands full in furnishing equipment for the conscripts, and at present will sell very little to the officers. In consequence the officers are forced to buy their equipment of private dealers, and the private dealers take advantage of the opportunity to charge exorbitant prices for everything that is furnished. The Government has fixed the price at which it will furnish military equipment, but as the demand far exceeds the supply, many of the soldiers, and especially the officers, are obliged to purchase of civilian dealers. If the

Government has the power to fix the price at which coal and foodstuffs shall be sold, why shouldn't it fix the price at which military equipment shall be sold? If any one should have the advantage of reasonable and just prices it is our soldier boys. It is reported that at some of the cities near southern military camps the merchants have entered into an agreement concerning the prices to be charged soldiers, and in every case the prices are exorbitant. It is reported that in one southern city soldiers are charged 50 cents for a shave and 75 cents for a hair cut. Other things are in the same proportion. Such conduct on the part of merchants near military camps, who at ordinary prices would reap a harvest, is outrageous. The Government should put a stop to it. The soldier who risks everything for his country is the last one who should suffer such indignities.

It is very evident that some of our city health officers are having their troubles in enforcing laws and regulations concerning public health and sanitation. The health officer who attempts to do justice to himself and the office he holds at once runs up against opposition from property owners, real estate men and politicians. Unless he has a good deal of backbone he at once lays down on the job. If he has backbone and enforces the laws and regulations which he is supposed to enforce, he stirs up animosity and abuse, and at the first favorable opportunity his head is "chopped off" by those whose toes have been trampled on. The only place where a health officer can really serve efficiently and well is in a city or town where public sentiment is back of him irrespective of the selfish opposition of a few large property holders and prominent real estate men. Occasionally a man, owning a large number of tenement houses all of which are insanitary and disease breeding, can be made to see that he hurts his own interests as well as the interests of the community in which he lives by not cleaning up his tenement houses. However, such men are few and far between, for the almighty dollar looms up big in the eyes of most men who own income-producing property, and they are short-sighted enough to see no further than present gain, and selfish enough to care nothing for the rights of others. But we take our hats off to the health officer who enforces laws concerning public health and sanitation and emphatically refuses to be bulldozed by ignorant or selfish property holders, mercenary real estate men or ambitious politicians.

In view of the fact that the income tax affects every physician we are publishing a list taken from the *Literary Digest* showing the income tax on incomes up to and including \$10,000,000 per year. Incidentally, we are not furnishing information concerning the income tax on incomes of \$10,000,000 because we think that any Indiana physician has an income of that size, but because the information may be interesting. By reference to this list every Indiana doctor can determine what he has to pay Uncle Sam as a penalty for having a net income amounting to over \$1,000 per year.

<i>Annual Income</i>	<i>Married Man's Tax</i>	<i>Single Man's Tax</i>
\$1,000.....	...	...
2,000.....	...	\$20
3,000.....	\$20	40
4,000.....	40	80
5,000.....	80	120
6,000.....	130	170
7,000.....	180	220
8,000.....	235	275
9,000.....	295	335
10,000.....	355	395
11,000.....	425	465
12,000.....	495	535
13,000.....	570	610
14,000.....	650	690
15,000.....	730	770
16,000.....	830	870
17,000.....	930	970
18,000.....	1,030	1,070
19,000.....	1,130	1,170
20,000.....	1,230	1,270
21,000.....	1,360	1,400
22,000.....	1,490	1,530
23,000.....	1,620	1,660
24,000.....	1,750	1,790
25,000.....	1,880	1,920
26,000.....	2,010	2,050
27,000.....	2,140	2,180
28,000.....	2,270	2,310
29,000.....	2,400	2,440
30,000.....	2,530	2,570
31,000.....	2,660	2,700
32,000.....	2,790	2,830
33,000.....	2,920	2,960
34,000.....	3,050	3,090
35,000.....	3,180	3,220
36,000.....	3,310	3,350
37,000.....	3,440	3,480
39,000.....	3,700	3,740
40,000.....	3,830	3,870
41,000.....	3,990	4,030
42,000.....	4,150	4,190
43,000.....	4,310	4,350
44,000.....	4,470	4,510
45,000.....	4,630	4,670
46,000.....	4,790	4,830
47,000.....	4,950	4,990
49,000.....	5,270	5,310
50,000.....	5,430	5,478
75,000.....	10,180	10,220
100,000.....	16,430	16,470
150,000.....	31,930	31,970
250,000.....	69,930	69,970
500,000.....	192,930	192,970
1,000,000.....	475,430	475,470
10,000,000.....	6,490,430	6,490,470

"CHARGE IT TO THE KAISER."

This includes new and old income tax. Earned incomes over \$6,000 will also pay an 8 per cent. tax on the excess, unless this clause is repealed.

ASPIRIN is another one of the trade-marked drugs for which physicians have created a demand and which, now that the public is familiar with it, is advertised in the daily papers. We harp a good deal upon the subject of self-drugging on the part of the public, and yet we are responsible for this evil. So many doctors are in the habit of saying to the patient, "Well, I think a little aspirin will relieve you," or perhaps they go farther and say, "Well, go to the drug store and get a little aspirin." Then the druggist comes in for his share of the blame by counter-prescribing, though in his case it results in profit and he has all of the encouragement offered by the willing public. A little knowledge is a dangerous thing, and the habit of so many physicians in telling their patients what is being prescribed tends to furnish the little knowledge which patients so often use to their detriment by adopting the dangerous policy of self-drugging. The wise manufacturer of a trade-marked drug begins by encouraging approval of his product by the medical profession, and he prates loudly of his intention of having his product prescribed by physicians only, and handled in a legitimate way. Inwardly he hopes for the time when the physician has popularized the trade-marked product among members of the laity so that he can cut loose from ethical bounds and advertise directly to the laity through the public press. No objections would be raised to this former aspect of the situation if it did not possess potential possibilities of great harm. Aspirin and a horde of other trade-marked drugs are valuable in their place as therapeutic remedies, but the laity is not capable of judging when or how drugs should be used, and in consequence there is a great deal of indiscriminate drugging with all of the evil results that attend that practice. We are not unmindful of the fact that indiscriminate drugging is not confined to the laity, for the medical profession likewise is guilty, though to a far less extent, and almost invariably with lessened evil effects. But there is a great difference in the use of a drug with a fair amount of intelligence and with no intelligence at all.

INDISPUTABLE proof has been furnished to show that the Germans have on more than one occasion deliberately and with brutal intent fired on or dropped bombs on hospitals and ambu-

lances. A recent report indicates that two Red Cross ambulances in plain sight of a detachment of German troops was fired on, presumably under orders from the officers in charge; and a protest, delivered by means of an aeroplane, was answered on the following day by a bombing of hospitals that were so clearly marked that there could have been no mistake. An act of barbarism which will not soon be forgotten by the American medical profession was the bombing of the Base Hospital of the Harvard Unit at Rouen, France, resulting in the death of Dr. W. T. Fitzsimmons of Kansas City, a first lieutenant in the Medical Reserve Corps, and the wounding of several other American physicians and inmates of the hospital. The cowardly and murderous attacks on hospitals, ambulances and Red Cross ships have been numerous, and there is not a shadow of proof to show that they were anything but intentional. The conduct of the Germans in this war seems to be increasingly despicable and uncivilized. It is equal to the savagery and barbarism of the most unenlightened of peoples. It can have but one result, and that is the enmity of the entire world for those who are responsible for such outrages. If the German war lords had a spark of reason in their thoughts, let alone having any conscience, they would realize that such conduct will result in an enmity of the other people of the world that a century of time will require to outlive. By this time they must know that they cannot win the war, and it would seem that they ought to realize that the more reprehensible their conduct in the closing days of the war the greater the tendency on the part of the allies to mete out a crushing punishment. We are loath to believe that the German people as a class are either responsible for this war or for the many outrages that have gone with the war. The surprising thing is that they have supinely and abjectly yielded to the domination of the kaiser and his advisors. It is hoped that they may yet repudiate the uncivilized actions of the autocratic government of Germany. In the meantime, we also hope that the allies never will stoop to methods of reprisal which can be placed on a par with the barbarous and inhuman acts about which we complain. Let us fight and fight valiantly and fairly. Victory is bound to come for those in whose hands the peace and serenity of the world is placed.

DEATHS

JOHN P. MARVIN, M.D., Harrison Township, near Lawrenceburg, died October 12, aged 76 years.

MRS. MARGARET MORRIS, widow of the late Dr. A. W. Morris of Russiaville, died October 17, aged 83 years.

ALLEN K. LANE, M.D., of Odon, died October 12 from cancer, aged 74 years. Dr. Lane was a veteran of the Civil War, and a graduate of Miami Medical College.

JOHN F. SIMISON, M.D., Romney, died October 15 at St. Elizabeth Hospital, Lafayette, following an appendectomy, aged 58 years. Dr. Simison graduated from Rush Medical College, class of 1881.

ERNST H. C. HEUSLER, M.D., Howell, Ind., died suddenly from heart disease, October 12. Dr. Heusler was born in Germany in 1852. He was a member of the Vanderburgh County Medical Society and the Indiana State Medical Association.

FRANK L. RODEBAUGH, M.D., Garrett, was murdered on October 24 by a negro on whom he was calling in connection with his work as city health officer. Dr. Rodebaugh was 59 years of age, and had served as city health officer of Garrett for five years.

CHARLES W. BENHAM, M.D., Vincennes, died October 3, aged 56 years. Dr. Benham was born near Wheatland, Knox County, in 1861, graduated from Vincennes High School and from the Louisville Medical College in 1889, and practiced medicine at Wheatland and Vincennes. He was a member of the Knox County Medical Society, the Indiana State Medical Association and the American Medical Association.

HARMER M. NEWMAN, M.D., South Milford, died October 12 from Bright's disease, aged 56 years. Dr. Newman was born near South Milford in 1861, attended Central Normal School at Danville, Ind., graduated from Rush Medical College, Chicago, in 1886, and immediately afterward began the practice of medicine in South Milford, where he continued until the time of his death. He was a member of the LaGrange County Medical Society and the Indiana State Medical Association.

JOHN KOLMER, M.D., died October 21 at his home in Indianapolis following a long illness. Dr. Kolmer was born in the Province of Preuse, Germany, fifty-one years ago, came to America at the age of 15, and two years later began the study of medicine at Indianapolis. He worked his way through Central Normal College, Danville, and graduated from the Jefferson Medical College, Philadelphia, in 1894. Postgraduate work was taken in Philadelphia and Reading, Pa., and Berlin, Munich and Vienna. He was a member of the Indianapolis Medical Society, Indiana State Medical Association, American Medical Association, and a life member of the Obstetrical and Gynecological Society of Germany.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

INDIANAPOLIS

DR. S. E. SMITH of Richmond, Ind., gave an address on "Mental Defectives" at the October meeting of the Steuben County Society.

DR. FRANK B. WYNN of Indianapolis went to Brown County one Saturday evening last month with the Nature Study Club, returning the following day.

DR. J. E. HUGHES of Indianapolis spent about a week last month attending a surgical clinic at Chicago. His brother, Dr. W. F. Hughes, took charge of the office during his absence.

DR. W. B. KITCHEN of Indianapolis, an ardent baseball fan, was one of the chief rooters at the opening game of the world's series at Chicago. He returned the Sunday evening after the game.

MEMBERS of the Indianapolis Board of Health, at one of their October meetings, held a lively discussion as to whether the department should grant permission for the establishing of butcher shops in Indianapolis for the exclusive sale of horse meat. Members of the Board did not seem too enthusiastic in their discussion of the subject and, according to Dr. G. B. Jackson, president, the matter was not definitely decided.

OUR executive secretary, F. E. Schortemeier, is endeavoring to visit as many of the county societies as possible. He addressed the Wayne

County Society at Richmond on Friday, October 26. On Tuesday, October 30, he was the principal speaker at the meeting of the Marion County Society. In addition he has made a number of addresses on the war situation before the Indiana University Alumni Association at Butler College and before the Marion Club of Indianapolis.

DR. PAUL MARTIN has been commissioned as captain in Indianapolis Base Hospital No. 32 and has reported to Ft. Benjamin Harrison, where the officers and enlisted men of the unit are in training. Dr. Martin already has seen ten months' experience in war hospitals. For six months he was at the head of a large war hospital in Bohemia and for four months after that was in another war hospital in Vienna. He returned to Indianapolis last June. The base hospital finally has received orders to move, but the exact date has not been published.

THE members of the Indianapolis Medical Society spent Sunday, October 21, roaming around the hills of Brown County. About twenty-five doctors and their wives, under the leadership of Chief Scout A. L. Marshall, secretary of the Indianapolis Society, went to Helmsburg by train and spent the day tramping around the country between that town and Nashville looking for hickory nuts and going into proper ecstasies over the scenery. Fortunately, no one was lost in any of the remote valleys or dense woods and all managed to return safely by the evening train.

SUPERIOR ability to "pull" their drives out of the rough enabled the team representing the Indiana Dental Society to defeat the Indiana Medical Society players in a golf match at the Indianapolis Highland Club, 18 to 13. As a result of the victory the dentists win a leg on the Wheeler trophy. Dr. J. A. Moag, of the Dental Society team, had the low gross score and gets to keep the trophy until the tourney is resumed next year. The physicians who failed to bring home the bacon were: Drs. Row, Tomlin, Torian, Ruddell, Kingsbury, Habich, Langdon, Pfafflin, Kemper, Marshall, Wright, Cregor, Read, Layman, Clevenger, Moon and Hendricks.

MISS EDITH G. WILLIS of Vincennes was elected president of the Indiana State Nurses Association at the annual meeting held at the Deaconess Protestant Nurses Home at Indianapolis. Other officers chosen were: Miss Gertrude Upjohn of Lafayette, first vice-president;

Miss Merle Doty of South Bend, second vice-president; Miss Bertha King of Richmond, secretary, and Miss Belle Emden of Indianapolis, treasurer. Miss Willis and Miss Frances Ott of Morocco were named as delegates to the annual meeting of the American National Nurses Association, and Miss Abbie Hunt Bryce of Indianapolis was appointed as a delegate to the Indiana Federation of Women's Clubs. Several letters from nurses who are in government service were read at the meeting.

INDIANA was well represented at the forty-third annual meeting of the Mississippi Valley Medical Association which was held in Toledo, Ohio, October 9, 10, 11. In addition to the number of Hoosier doctors who took part in the program, there was an unusually large attendance from all parts of the state and the meeting proved one of the most successful that the organization has had for some time. Dr. Frank B. Wynn of Indianapolis was elected first vice-president of the association for the year 1917-18. The following papers were read by Indiana doctors: "Surgery of the Chest," Jos. Rilus Eastman, Indianapolis; "Gunshot Injuries of Peripheral Nerves," William C. Moore, Summitville; "Ureteral Anomalies," H. O. Mertz, Laporte; "What Reliance Can Be Placed in Our Laboratory Findings in Central Nerve Syphilis?" Albert E. Sterne, Indianapolis; other Indiana doctors who took part in the discussions were Dr. Henry R. Alburger, Dr. Scott R. Edwards, Dr. Murray Hadley and Dr. J. A. MacDonald, all of Indianapolis, and Jos. D. Heitger of Bedford.

THE most successful affair ever given in Indiana by the Phi Beta Pi medical fraternity was the military banquet held at the English Hotel, Indianapolis, Saturday, October 27, in honor of its members who are in war service. About seventy-five active and alumni members and guests of honor from Ft. Benjamin Harrison attended. There were twenty-four officers in uniform among the guests, including all ranks from lieutenant to major, and a short talk was made by each one. C. F. Frazier, intern at the Indianapolis City Hospital, was master of ceremonies, and Dr. S. E. Earp of Indianapolis was toastmaster. The following toasts were given: Dr. H. H. Wheeler of Indianapolis, "How to Win the War"; Lieut. C. A. Stayton, Ft. Benjamin Harrison, "The Boys in Uniform"; Dr. C. E. Woods, superintendent of the Methodist Hospital, Indianapolis, "Patriotism of the Doc-

tor in the Present Crisis"; Dr. A. R. Barnes, Indianapolis, "The Undergraduates." Major Sidney Chappelle of Ft. Harrison was made an honorary member of the fraternity. The initiatory service was conducted with more than the usual solemnity, the first part being in charge of Dr. Earp, and the ritualistic work being conducted by an active member. Three Past Supreme Archons, the highest office of the national fraternity, were among the banqueters. Crossed silk flags at each plate gave a very patriotic air to the gathering, and each guest received a copy of the song "All for America," the words of which were written by D. T. Praigg. It was brought out at the meeting that the Phi Beta Pi fraternity was the first at Indiana University to buy a Liberty Bond. It was announced that the junior class at the university had purchased \$1,500 worth of bonds.

GENERAL

DR. J. W. WHITE of Gary suffered a recent attack of diphtheria.

DR. W. M. MILEY of Anderson spent the month of October in New York City.

LIEUT. S. J. FLETCHER of Connersville has been ordered to Fort Oglethorpe, Ga.

KENDALLVILLE observed Public Health Week by a full week's program, November 4 to 10.

DR. J. C. BAXTER, formerly of Auburn, has located at Waterloo for the practice of medicine.

DR. CARL BAKER, formerly of Herron, Ill., is locating at Columbus for the practice of medicine.

DR. J. A. MACDONALD of Indianapolis has returned from an extended vacation tour in Pennsylvania.

DR. JOHN E. KELLY of the Home Hospital staff, Marion, has been ordered to Fort Oglethorpe, Ga.

DR. L. E. JEWETT of Wabash has been promoted to the rank of major in the Medical Officers' Reserve Corps.

PRESS dispatches from Paris report a highly satisfactory trial flight of an airplane ambulance with two stretchers.

DR. J. F. MCCOOL has been appointed as one of the physicians in the medical clinic at the City Dispensary, Indianapolis.

THE Eleventh District Medical Society was entertained by the Carroll County Medical Society at Flora on October 18.

DR. H. R. FARNHAM, formerly of St. Joe, has purchased the practice of Dr. W. A. Samuel at Butler and removed to that place.

DR. HOMER OLIPHANT has been appointed first surgeon at the National Soldiers' Home, Marion, with the rank of captain.

DR. EDWARD H. FRIGGE of Vincennes was married October 4 to Miss Elma Meskimen of Allison Prairie, Lawrence County.

DR. ANNA E. BLOUNT of Chicago spoke on the subject of "Eugenics" before the Laporte County Medical Society on October 12.

DR. W. F. BUTLER of Cayuga has taken up the work of Drs. J. L. Saunders and J. W. Casebees of Newport, who have entered army service.

DR. JOHN C. FRETZ, formerly of Deedsville, has located at Waterloo for the practice of medicine, and has moved his family to that place.

DR. GEORGE W. BONER of Washington for some time in training at Fort Benajmin Harrison, has been assigned to duty at Washington, D. C.

THE members of the Lake County Medical Society were entertained at a banquet on October 12 by the Sisters of St. Margaret's Hospital, Gary.

PHYSICIANS of Union City have adopted a regular fee bill which is a little higher than former charges, due to the increased cost of drugs, etc.

DR. ALFRED HENRY, Indianapolis, was elected president of the Mississippi Valley Tuberculosis Society at its recent meeting at Minneapolis, Minn.

LIEUT. L. H. REDMAN of Elizabethtown, assigned to duty with the Fifty-Fifth U. S. Infantry, has been promoted to the rank of captain.

DR. W. O. PHILLIPS, Evansville, who has been in training at Fort Benjamin Harrison for two months has been assigned to Camp Taylor for duty.

DR. A. E. FAUVE of Fort Wayne, first lieutenant in the Medical Officers Reserve Corps, sailed October 1 for France for war service at the front.

Two hundred and thirty-four cases of diphtheria were reported in Indianapolis during the month of September, with fifteen deaths from the disease.

DR. H. O. BRUGGEMAN of Fort Wayne, with a commission as captain in the Medical Officers Reserve Corps, has been ordered to Fort Oglethorpe, Ga.

F. C. ATKINSON of Indianapolis was elected president of the Indiana Section of the American Chemical Society at its recent meeting at Indianapolis.

DR. T. J. O'BRIEN, formerly located at Stilesville, has purchased the practice and property of Dr. D. M. Reynolds of Clayton and removed to that place.

DR. and MRS. JOEL WHITAKER and family of Indianapolis have returned from the Black Mountain, North Carolina, where they spent the summer months.

DR. J. S. BOYERS of Decatur attended the great War Meeting of the American Public Health Association, held at Washington, D. C., October 17 to 20.

THE Dubois County Medical Society met in regular session at Huntingburg, October 16. Dr. J. P. Salb of Jasper presented a paper on "Infantile Paralysis."

DR. H. C. KNAPP, Huntingburg, has received his commission as captain in the Medical Officers Reserve Corps and assigned to Camp Mille, Golden City, N. Y.

DR. B. D. MYERS of Bloomington, head of the chair of anatomy of Indiana University School of Medicine, has been elected secretary of the State Anatomical Board.

IN connection with the new course in medicine added to Notre Dame University, South Bend, the school will establish a medical library which will occupy prominent space in the new library building.

DR. LORIN W. SMITH of Wabash, who suffered the loss of both legs in an automobile accident a few months ago, is candidate for mayor of the city of Wabash.

LIEUT. J. A. GRAHAM of Gary was tendered a banquet by Lake County men on September 26 prior to his departure for the training camp at Ft. Benjamin Harrison.

DR. ALLEN DEVILBISS, for many years a physician in Fort Wayne, died October 1 at his home in Toledo where he has been engaged in the manufacturing business.

MRS. O. L. McCAY, wife of Dr. Ora L. McCay of Romney, died October 2 at an Indianapolis hospital, where she had been taken following an attack of appendicitis.

DR. A. P. F. GAMMACK of South Bend, recently returned from the battlefields of France, has been delivering some interesting lectures on his experiences before local societies.

LIEUT. EDWARD A. WILLIS, Indianapolis, has been assigned to the division of ophthalmology and otolaryngology, section of surgery of the head, and has been ordered to Fort Monroe, Va.

LIEUT. E. R. HIATT, Portland, for several months in training at Fort Benjamin Harrison, has been ordered to Fort Sill, Oklahoma for special work in the treatment of gas poisoning.

THE Fulton County Medical Society met at Tiosa, October 5, in regular session. Dr. M. C. Meek of Tiosa read a paper on "Bronchopneumonia," and Dr. C. L. Slonaker of Culver led in the discussion.

DR. PAUL MARTIN, Indianapolis, who has served ten months in war hospitals in Bohemia and Vienna, has been commissioned as captain in Base Hospital No. 32, which expects sailing orders daily.

THE following physicians have received appointments as pension examining surgeons: Dr. D. L. McAuliffe, North Vernon; Drs. H. P. Metcalf, Charles H. Parsons and E. I. Wooden of Rushville.

DR. C. S. WOODS, superintendent of the Methodist Hospital at Indianapolis, was guest of the Gibson County Medical Society at their regular meeting, held at Princeton the latter part of September.

THE country home of Vincent Astor at Rhinecliff, N. Y., has been offered to the Army Medical Department for use as a hospital during the war. The estate overlooks the Hudson, and is valued at \$8,000,000.

By the will of the late Dr. John Kolmer, his entire medical library is bequeathed to the Indianapolis Public Library, and his collection of surgical instruments to the Presbyterian board of foreign missions.

A BEQUEST of \$75,000 will be received by the Methodist Hospital at Indianapolis through the recent death of Mrs. Emma Messick. This bequest was made by the late John Messick of Shelbyville, prior to his death.

THE Jay County Medical Society met at Portland, October 5, in the offices of Drs. Nixon and Wiley. Dr. Caylor of Pennville gave a report of the annual session of the Indiana State Medical Association held at Evansville.

DR. HARRY C. O'DELL of Farmersburg, first lieutenant in the Medical Corps of the U. S. Army, was married September 22 to Miss Maye Wood, also of Farmersburg. Lieutenant O'Dell is now stationed at Ft. Benjamin Harrison.

DR. E. D. MADDUX, LaCrosse, has been relieved from army service to resume practice in his home town. The release was granted because the enlistment of the only two physicians of the town left the people without medical aid.

THE marriage of Dr. Jonathan P. Worrell of Terre Haute to Mrs. Mary E. Baker, Germantown, Pennsylvania, on November 3, has been announced. They will be at home after February 15 at 430 North Center Street, Terre Haute, Ind.

DR. E. M. VAN BUSKIRK has been appointed on the Fort Wayne City Health Board to succeed Dr. H. O. Bruggeman who has been called into active army service. Dr. Van Buskirk already is a member of the Allen county health board.

DR. J. J. CONNELLY of Rockville was married recently to Miss Aileen Wingfield of Hutchinson, Minn. Dr. Connelly is commissioned in the Medical Officers Reserve Corps and expects to be ordered into active service soon.

DR. STANLEY A. CLARK of South Bend was married on October 16 to Miss Flora G. Pollock, also of South Bend. After a trip to New York City and Atlantic City, N. J., Dr. and Mrs. Clark are to be at home at 807 East Jefferson Boulevard, South Bend.

RENE DUBOIS, son of Dr. Edouard J. Dubois, former city bacteriologist of Indianapolis and now captain of the U. S. Medical Corps, assigned to headquarters of the "Rainbow" division, was killed in action with French Army at Verdun, September 7.

AMONG the Americans lost when the American transport *Antilles* was sunk by a torpedo on October 17, were two privates in the Medical Department of the United States Army, Melville E. Bradbury of Boston, and Guy R. Bosworth of Milburn, N. J.

THE Good Samaritan Hospital of Cincinnati opened a class on November 1 in surgical nursing for young women who contemplate rendering service, if called upon, on European battlefields. The class was limited to fifteen pupils, and includes a six months' course.

THE following officers of the Kentucky State Medical Association have received commissions and been called for duty in the United States medical service: Major P. H. Stewart, president-elect; Major Milton Board, president, and Major A. T. McCormack, secretary.

DR. F. V. STUCKY of Gosport, who abandoned active practice of medicine a few years ago, turning his attention to his drug business, has again opened an office for the practice because of the need for medical work brought about by the death of Dr. H. A. Fox of Gosport.

THE Bulletin of the Texas State Board of Health has been discontinued and a department in the *Texas State Journal of Medicine* will be devoted to such information and articles as heretofore have been published in the special publication. Lack of funds has necessitated this change.

EIGHT employees of Eli Lilly & Company, classed as expert chemists and biologists, have been exempted from military service by the National Army Appeal Board on the ground that they were engaged in industries necessary to the maintenance of the military establishment and national interest.

THE JOURNAL will be sent subscribers who are in military service at home or abroad, without additional expense, on receipt of full military address. Keep your address up to date by dropping a card to THE JOURNAL of the Indiana State Medical Association, 406 West Berry Street, Fort Wayne, Ind.

A LETTER from Dr. C. R. Bird, Greensburg, who is serving in the Lord Derby War Hospital, Warrington, England, says that food conditions in England are not as serious as in this country, and that a pound loaf of bread sells for 5 cents. He reports good crops in England this year, especially wheat and oats.

YOUNGSTOWN, OHIO, is one of the smallest cities in the country to equip a base hospital unit. This unit left Youngstown on August 8, with 27 officers and 153 enlisted men, and have been stationed at the training camp at Allentown, Pa., for final instruction. The time of departure for France is not known.

ONE of the largest and most enthusiastic meetings of the Grant County Medical Society was held September 24 at Van Buren. A splendid banquet was served by the Red Cross Chapter of Van Buren, after which the society adjourned to the Farmers' Trust Company Bank Building where the scientific meeting was held.

INDIANA has been admitted to the Birth Registration Area by the federal government. Federal investigators, in their recent examination, found that 92.7 per cent. of all births were registered, leaving a delinquency against doctors and midwives of 6.3 per cent. Ninety per cent. registration was required for admittance to the registration area.

THE annual meeting of the Eighth District Medical Society was held at Muncie, October 18. Dr. Will C. Moore, who served in a hospital unit in Austria last year, addressed the society; Dr. Charles S. Humes of Indianapolis spoke on the subject "Syphilis of the Nervous System," and Dr. C. M. Mix of Muncie discussed the subject "Visceral Syphilis."

THE Minnesota State Medical Association, at its annual meeting in St. Paul, October 11 and 12, elected the following officers: President, Dr. Arthur J. Gillette, St. Paul; vice-presidents, Drs. O. G. Strickler, New Ulm; E. H. Frost, Willmar, and M. J. Lynch, Minneapolis; secretary, Dr. Thomas McDavitt, St. Paul, and treasurer, Dr. Earle R. Hare of Minneapolis.

THE 104th annual meeting of the Vermont State Medical Society was held at Barre, October 11 and 12. Officers for the ensuing year are: President, Dr. C. W. Bartlett, Bennington; vice-president, Dr. William Lindsay, Montpelier; secretary, Dr. William G. Ricker, St. Johnsbury, and treasurer, Dr. E. H. Martin, Middlebury. The 1918 meeting will be held in Burlington.

WORD received from the Surgeon-General of the U. S. Army conveys the information to officers of the Medical Reserve Corps of the United States Army, inactive list, that assignment to active duty may be delayed, and that they are advised to continue their civilian activities pending receipt of orders. They will be given at least fifteen days' notice when services are required.

DR. CHARLES J. MCINTYRE of Indianapolis, after spending about two months at Ft. Benjamin Harrison, has been sent to Montgomery, Ala., to assist in the examination of men of the Ohio National Guard for symptoms of tuberculosis. Dr. McIntyre is one of the first Indiana men to be sent out as tuberculosis expert, and while his work is under the direction of the War Department, it is financed by the Marion County Society for the Prevention of Tuberculosis.

DR. ALLEN W. FREEMAN, formerly epidemiologist of the United States Public Health Service, has been secured for the position of Commissioner of Health of Ohio, thus completing the organization of the state department of health as contemplated by the new law passed by the legislature in March which abolished the old state board of health. Dr. Freeman is to be the administrative and executive head of the department.

THE Public Health Service is authority for the statement that Dr. Ch. Wardell Styles has found 47 cases of hookworm infection in the first 75 militia men examined by him. Danger of a widespread European epidemic is pointed out, and it appears that all recruits from certain states will have to be carefully examined and treated in American training camps. The amount of work involved is enormous.—*Texas State Journal of Medicine*, October.

DR. GEORGE THOMAS PALMER of the tuberculosis committee of the National Council of Defense will speak before the Saturday Lunch Club at the Indianapolis Chamber of Commerce,

November 24. The luncheon costs 35 cents, and all physicians of the state who are interested are invited. Dr. Palmer is also president of the Illinois State Society for the Prevention of Tuberculosis and with the State Board of Health and the State Council of Defense has in full swing a very interesting and useful piece of health work in the state of Illinois.

THE semi-monthly journal, *Pediatrics*, devoted to the diseases of children, edited by William Edward Fitch of New York, has been incorporated with the *Medical Review of Reviews*, and after Jan. 1, 1918, will not appear as a separate publication. A special department in the *Medical Review of Reviews* will be devoted to pediatrics. Important symposia covering this subject are now in progress, and a staff of associate editors is being formed. With 1918 the *Medical Review of Reviews* enters upon its twenty-fourth year.

THE Committee on Medical Education of the Ohio State Medical Association, with the assistance of Dr. William D. Porter, professor of clinical obstetrics, University of Cincinnati, during the past summer, has been conducting group "post-graduate obstetric meetings" throughout the state. These meetings consist of several inter-county group gatherings scheduled in a given week in the larger towns of the county, and are intended to offer to the practicing physicians of the state an opportunity to review, in the shortest possible time, the entire subject of obstetrics — in a thoroughly practical and up-to-date manner.

DEDICATION of a memorial tablet to Dr. John Stough Bobbs, pioneer surgeon, philanthropist, and patriot of Indianapolis, was held at the Public Library on October 11. Dr. Bobbs founded the free city dispensary of the Indiana Medical College, and endowed it, and he also presented a large medical library to the school. He was known as the "father of cholecystotomy"; was one of the original commissioners who organized the Indiana Hospital for the Insane; served as brigade surgeon during the Civil War, and at one time was senator from Indiana. Dr. Bobbs died in 1870.

THE new north wing of the Methodist Hospital, Indianapolis, completed in 1916 at a cost of \$40,000, was dedicated October 14 and 15, the speakers being Bishop William F. Anderson, Charles W. Fairbanks, Bishop Thomas Nichol-

son, Drs. W. N. Wishard, A. C. Kimberlin, T. B. Noble and Supt. Charles S. Woods. The new wing, or "surgeries," consists principally of six operating rooms (making a total of ten operating rooms for the hospital) four etherizing rooms, and a number of other rooms to be used in connection with operations. Each of the surgeries is provided with running distilled water. The property now is valued at \$600,000, and has 250 beds.

DURING October the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

General Laboratories: Arsenobenzol (Dermatological Research Laboratories, Philadelphia Polyclinic).

Jno. T. Milliken & Co.: Acetylsalicylic Acid Capsules-Milliken, Acetylsalicylic Acid Tablets-Milliken.

Monsanto Chemical Works: Acetylsalicylic Acid (Aspirin), Monsanto.

Schering and Glatz: Atophan, S. & G.

E. R. Squibb and Sons: Silver Protein-Squibb.

Standard Oil Company of Ind.: Stanolind Surgical Wax.

AMONG Indiana men whose names appeared on the War Program of the forty-fifth annual meeting of the American Public Health Association held at Washington, D. C., October 17 to 20, were: Dr. J. N. Hurty, secretary of the Indiana State Board of Health; Dr. H. E. Barnard, Indianapolis, and Arthur L. Walters of Indianapolis. Officers for the coming year were elected as follows: President, Dr. C. O. Hastings, Toronto, Ont.; vice-presidents, Drs. Geo. M. Kober, Washington, D. C.; Emanuel S. Iglesias, Vera Cruz, Mexico, and Guilford H. Sumner, Des Moines, Ia.; secretary, Dr. A. W. Hedrich, Boston, and treasurer, Dr. Lee K. Frankel, New York. The association adopted the resolution favoring the bestowal of the Nobel Prize on Major-General William C. Gorgas, Surgeon-General, U. S. Army, for placing yellow fever on the list of preventable diseases.

AT the recent meeting of the Clinical Congress of Surgeons in Chicago, the following resolution regarding physical and military training for young men was unanimously passed. A similar action was taken by the State Committees of the Medical Section, Council of National Defense, in their meeting at Chicago,

October 23, at which all states were represented with the exception of Maine and Delaware:

WHEREAS, The experiences of the nation convince us of the necessity for Universal Military Training, to furnish qualified men for defense, to strengthen manhood and mental poise, and to make for a more efficient citizenship, and

WHEREAS, We believe it will democratize youth and furnish discipline, while developing physical force and endurance, and will produce better fathers and workers for the ranks of peace; therefore be it

Resolved, That the Clinical Congress of Surgeons at its eighth annual session urges on Congress at its coming session the passage of a measure along the general lines of the Chamberlain Bill for Universal Military Training, and that the cantonments now used by the National Army be utilized, if possible, for such work.

MORE than one hundred members of the Union District Medical Association, comprising Butler and Preble counties, Ohio, and Union, Wayne, Rush, Franklin, Fayette and Henry counties, Indiana, met at Oxford Ohio, October 25, the guests of Dr. R. Harvey Cook, at Oxford Retreat. It was the one hundredth semi-annual meeting of the Association. Dinner was served in the amusement hall of the sanatorium, following which Dr. Charles P. Emerson of Indianapolis spoke on "Our Profession in Times of War." Dr. J. C. Sexton of Rushville, Ind., acted as toastmaster, and responses were made by Dr. E. R. Beard, Liberty, Ind.; Dr. Charles L. Bonifield of Cincinnati; Dr. C. S. Bond of Richmond, Ind.; Dr. O. J. Gronendyke of Newcastle, Ind.; Dr. W. D. Haines of Cincinnati; Dr. C. S. Houghland of Milroy, Ind.; Dr. M. B. Ricketts of Cincinnati; Dr. W. S. Hancock of Millville, Ohio; and Dr. W. H. Hawley of College Corner, Ind. Dr. William A. Thompson, Liberty, Ind., was elected president of the Association, and Dr. A. L. Brankamp, Richmond, Ind., secretary. The next meeting will be held at Brookville, Ind., in April, 1918.

THE cause of cancer is yet unknown to medical science, according to a statement made before three thousand surgeons attending the eighth annual convention of the Clinical Congress of Surgeons, which held a week's convention at Chicago last month. This organization is merged with the American College of Surgeons and is now known as the Clinical Congress of the American College of Surgeons. Dr. William T. Mayo, Rochester, Minn., president-elect of the new body, in discussing the advances made in the treatment of cancer, asserted that while physicians cannot describe exactly the causes of that disease, it is known that hot foods

taken into the stomach often result in cancerous growths in that organ. Clean food coupled with food of normal temperatures might go a long way in removing one of the first causes of cancer, Dr. Mayo said. Sir Berkeley Moynihan of Leeds, England, a member of the British Army staff, declared that in no one line of surgery had such strides been made as in lung and pleura surgery. He advised surgeons contemplating war service to be prepared to go about lung surgery resolutely and without misgivings as to severity. He said the lung can be cleansed of slivers of shells just as one would cleanse a new sponge. Other officers chosen were: president, Dr. John T. Clark, Philadelphia; secretary, Dr. Franklin H. Martin, Chicago, and treasurer, Dr. Allen B. Kanavel, Chicago. Dr. Mayo will succeed to the presidency after Dr. Clark's term.

THE Executive Office of the Indiana State Medical Association, in inaugurating an active campaign for new members, has sent the following timely and urgent letter to all county medical society secretaries:

"With our ranks depleted by the temporary loss of doctors who have joined the Medical Officers' Reserve Corps, the Indiana State Medical Association must conduct an active membership campaign this fall to maintain our organization at full strength. This does not mean that the caliber of our personnel can be lowered for the sake of numbers. There are a number of high grade doctors in your county, however, who do not belong to the organization.

"Some of these are delinquents who have simply neglected to pay their dues. Change in location may have resulted in failure to affiliate with a new county society. Other doctors, perhaps, have not been duly impressed with the advantages which membership in the county and state societies bestows. The disorganization which has resulted in some quarters through pressing demands of war service comes at a time when there never was greater need for a compact fighting force to present a solid front at the next meeting of the legislature.

"Will you please send us at your earliest convenience: (1) the name and address of every man in your county who stands high as a doctor and citizen but who has not been a member of your society; (2) the name and address of every delinquent member. Please consult doctors in every part of your county in order that no one shall be overlooked in this canvass. If your society has had an election of officers recently, be sure that the names and addresses of the new president and secretary are sent to us at once, along with any changes or additions to your present membership list.

"Remember that the Indiana State Medical Association needs the active, untiring support of every physician. Let's inject new life into our membership committees and watch ourselves grow. Hoping to receive an early reply, and thanking you for your cooperation in this matter, we remain,

"Yours very truly,

"F. E. SCHORTEMEIER, Executive Secretary."

EQUIPMENT OF MEDICAL OFFICERS.—More doctors are coming into the training camps constantly, and the variegated sort of equipment that they bring justifies some advice as to the necessities. True, umbrellas no longer appear in their equipment, but they still bring swords and rocking chairs, and, no doubt, if the military equipment establishments sold walking spurs and guard lines, some enthusiastic doctor would be induced to buy. A doctor ordered on active duty should purchase only the absolute necessities. The quarters that will be assigned are limited, and the military authorities will allow only a certain amount in weight and shape for transportation in campaign. It is folly, therefore, to load up with extra baggage, as the excess is destined to immediate shipment home. The following list will cover all that is necessary for the winter season:

Uniforms.—One heavy weight serge uniform, with cap, for dress. A white linen collar and white cuffs must be worn with this uniform. Many of us find a white linen military stock more convenient than a stiff linen collar.

One olive drab service blouse, with two pairs of trousers, which it is usually possible to purchase at contract price from the government, though the latter, privilege is by no means certain. The decorations on the collar of the blouse should be the letters U. S. R. and a caduceus on each side, the letters in front, the caduceus a short distance behind; on each shoulder, the bars indicating the rank, and around each sleeve, the proper distance above the wrist, a circle of brown braid.

No leather belt is worn outside of the blouse. A sword is unnecessary. The belt to support the trousers should be olive drab webbing.

Shirts.—Two olive drab, flannel. More may be obtained from the quartermaster at a very reasonable price. The collar ornaments for the shirt, when the blouse is not worn, are a caduceus on the left side, U. S. R. on the right side, near the front, with the rank designation a short distance behind it. It is better to buy the smaller size of these ornaments.

Puttees.—Leather, one pair, costing about \$7. These must be purchased to fit.

Shoes.—One pair of Munson last, tan, a half size longer and one size wider than the shoe ordinarily worn. More shoes may be purchased from the quartermaster's stores on arriving at camp.

Overcoat.—A heavy regulation officer's coat. This also may be purchased from the quartermaster, but alteration will be necessary, and the quartermasters do not always have them in stock. It is better, therefore, to purchase it at home.

A sheepskin-lined, moleskin, short coat, with a fur collar, is very useful, though not necessary. This is called a "trench" coat.

A tan-colored rubber coat is essential, and a pair of light-weight rubber boots useful. These boots should be large enough to allow the wearing of a pair of felt slippers. The latter can also be used in the barracks.

Underwear.—Woolen; two suits.

Socks.—Two pairs, light weight woolen; two pairs, heavy weight woolen.

Gloves.—Woolen, olive drab.

All of these can be procured from the quartermaster on arriving at camp, provided, of course, his stock has not been depleted.

Hat.—A campaign hat, with an officer's hat cord, is necessary. This is to be worn on all occasions, except for dress.

Sweater.—A sweater is not provided for in regulations, but is allowed in camp for fatigue. This must be of the regulation olive drab color. The Red Cross sleeveless sweaters are a great comfort, but must be worn inside the shirts. The Red Cross wristlets are allowed and advisable, if of olive drab.

Pajamas.—Woolen pajamas are a necessity. Night-gowns are ridiculous.

Trunk.—One locker trunk, of regulation size. At present they cannot be procured from the quartermaster.

Cot.—A strong Gold Medal cot, higher than is usually sold—in fact, high enough to allow of placing the trunk underneath.

Bedding-Roll.—This must be purchased, but can be procured in camp for about \$11.25.

Blankets.—Bring them with you. Thick, warm, woolen blankets, of dark color, preferably three. Two comforters—one woolen and one cotton, of strong material, the cotton to sleep on, the woolen to wrap up in.

Sheets.—Only the fastidious need sheets, and army life soon cures that disease. The sheet is about as useful at this time of year in barracks as a bedspread would be.

Pillow.—A small, thick, hard pillow, covered with dark material. A pillow slip is unnecessary.

Towels.—Turkish towels answer the purpose best. These can be purchased in camp, at a reasonable price, but it is well to bring several along.

The Red Cross comfort kit and toilet roll will be needed. A safety razor is best, as often one shaves without a mirror and with cold water.

Do not forget the tooth brush, and to use it. If this has been neglected heretofore, practice its use before coming to camp.

In this connection, it will be well to add that it may serve a good turn to practice daily bathing, as it will be necessary in barracks. Also, it is *à propos* to remark that it would be well to bring your table and home manners with you, as you are expected to be house-broken while living with other men.

A small, light typewriter is a great convenience.

It will be possible to procure everything else needed on arriving at camp, except some ready money to carry you over until you cash your first pay check. I might add that pay vouchers are sent in on the 20th of the month, and not after, and pay therefor is received near the first, by check of large denomination, which it is not always easy to cash.

Instruction in camp is undergoing many changes leading up to actual service conditions, as, for instance, intensive equitation, gas-mask instruction, actual duty in the elaborately constructed trenches on the reservation, etc.—*Journal A. M. A.*, Oct. 27, 1917.

LIST OF PHYSICIANS IN THE STATE OF INDIANA WHO HAVE APPLIED FOR OR WHO HAVE BEEN DRAFTED INTO MILITARY SERVICE

(This list has been furnished by the Indiana State Council for Defense and is certified up to Oct. 1, 1917. There may be and probably are a few errors as the list has been prepared under difficulties, but in the main it is correct.)

ADAMS COUNTY

Hinchman, Clarence Paul, Geneva.....Drafted; not exam.
Jones, D. D., Berne.....Acc. M.R.C.
Jones, H. O., Berne.....In service

ALLEN COUNTY

Barnett, C. E., Fort Wayne.....Acc. M.R.C.
Beall, C. G., Fort Wayne.....App. M.R.C.
Benninghoff, D. R., Jr., Fort Wayne.....Acc. M.R.C.
Blosser, H. V., Fort Wayne.....App. M.R.C.
Bruggeman, H. O., Fort Wayne.....Com. M.R.C.
Calvin, W. D., Fort Wayne.....App. M.R.C.
Dancer, C. R., Fort Wayne.....Com. M.R.C.
Ditton, I. W., Fort Wayne.....Com. M.R.C.
Eberly, K. C., Fort Wayne.....Com. M.R.C.
Edlavitch, B. M., Fort Wayne.....Com. M.R.C.
Farnham, W. C., Fort Wayne.....Com. M.R.C.
Fauve, A. E., Fort Wayne.....Com. M.R.C.
Johnston, Donald D., Fort Wayne.....M.R.C.
Gilpin, J. H., Fort Wayne.....Com. M.R.C.
Hamilton, Allen, Fort Wayne.....Com. M.R.C.
Mendenhall, E. N., Fort Wayne.....Com. M.R.C.
Metcalf, D. D., Fort Wayne.....Com. M.R.C.
Porter, M. F., Jr., Fort Wayne.....App. M.R.C.
Rawles, L. T., Fort Wayne.....App. M.R.C.
Rhamy, B. W., Fort Wayne.....App. M.R.C.
Schanz, R. F., Fort Wayne.....Acc. M.R.C.
Rosenthal, M. L., Fort Wayne.....App. M.R.C.
Senseny, H. M., Fort Wayne.....Com. M.R.C.
Singer, E. C., Fort Wayne.....Com. M.R.C.
Van Buskirk, E. M., Fort Wayne.....App. M.R.C.
Van Sweringen, B., Fort Wayne.....App. M.R.C.
Van Sweringen, G., Fort Wayne.....App. M.R.C.

BARTHOLOMEW COUNTY

Breitenbach, O. C., Columbus.....App. M.R.C.
Redman, L. H., Elizabethtown.....Acc. M.R.C.
Roepe, A. P., Columbus.....Acc. M.R.C.
Thorn, W. E., Columbus.....Acc. M.R.C.

BENTON COUNTY

Bundy, Clyde Talbot, Earl Park.....Acc.
Clayton, Geo. R., Jr., Fowler.....Acc.
Hubbard, Henley H., Boswell.....Acc.
Randall, Edwin, Ambia.....App.

BLACKFORD COUNTY

Buckles, Herbert L., Hartford City.....Com. Ohio R.C. Unit
Sellers, Charles A., Hartford City.....App. M.R.C.

ROONE COUNTY

Johnson, Thos. B., Jamestown.....Acc. M.R.C.

CARROLL COUNTY

Crampton, Chas. C., Delphi.....Com. M.R.C.
Locke, F. C., Ockley.....Com. N.G.

CASS COUNTY

Badders, Ara Carl, Onward.....Acc.
Hatfield, James, Logansport.....Applied
Holmes, Will W., Logansport.....In service
Johnson, Harry Chas., Logansport.....Acc.
Nelson, Jas. V., Logansport.....In service
Nicodemus, John Philip, Logansport.....In service
Stanton, Jas. Justice, Logansport.....Acc.
Troutman, Rodney E., Logansport.....In service

CLARK COUNTY

Cortner, Sidney G., Otisco.....Acc. M.R.C.
Elrod, Stephen B., Otisco.....Com. M.R.C.
Reeder, Henry H., Jeffersonville.....Acc. M.R.C.; drafted
Walker, Jas. W., Jeffersonville (Ind. Reform)....App. M.R.C.

CLAY COUNTY

Brown, Archie Schuyler, Clay City.....App. M.R.C.
Dilley, Fred Counselman, Brazil.....Rej. Lilly Base Hosp.
Finley, G. W., Brazil.....App. M.R.C.
Hawkins, Robt. W., Brazil.....Nat. Guard
Hirt, Luther S., Brazil.....Rej. M.R.C.
Palm, Wm., Harmony.....Holds Public Office
Pell, Harry Milton, Brazil.....Holds Public Office
Rentschler, L. C., Center Point.....Acc. Hosp. Unit "T"
Sourwine, Clint Crosdale, Brazil.....Nat. Guard
Weaver, Timothy M., Cory.....App. M.R.C.
Williams, Lewis L., Brazil.....Com. M.R.C.

CLINTON COUNTY

Chittick, Archibald, Frankfort.....In service
Chittick, Golding, Frankfort.....Acc. Ambulance Co.
Clark, Noah Webster, Rossville.....Acc. Gov. service
Johnson, Robt. Carson, Frankfort.....In service
Robinson, John Eayres, Geetingsville.....Accepted
Thorpe, Byron B., Micigantown.....Gov. service

DAVIES COUNTY

Boner, Geo. W., Washington (Loogootee).....Acc. M.R.C.
Bowman, Ira E., Odon.....Acc. M.R.C.
May, Vance, Washington.....App. M.R.C.
Rang, Arthur A., Washington.....Drafted and exempted
Winkleplex, Aaron M., Elora.....Acc. M.R.C.

DEARBORN COUNTY

Holtegel, Dillsboro.....Navy
Jackson, John M., Aurora.....Acc. M.R.C.
Johnston, D. E., Moores Hill.....Acc. M.R.C.
Randall, J. Wesley, Lawrenceburg (Home City, Kan.).....Rej. M.R.C.
Smith, Eben, Dillsboro.....In Army
Stewart, O. H., Aurora.....Acc. M.R.C.
Theon, J. F., Aurora.....Applied
Ulrich, A. J., Aurora.....Acc. M.R.C.
Wallace, E. R., Aurora.....App.

DECATUR COUNTY

Pird, Chas. R., Greensburg.....Acc. Harvard Unit
Clark, Prosser E., Clarksburg.....Rej. M.R.C.
Glass, Jacob C., Millhousen.....Rejected
Jewett, Earl Dayton, St. Paul.....Acc.; goes to France
Riley, Eden T., Greensburg.....App. M.R.C.
Tindall, Paul R., Greensburg.....Drafted; not exam.
Turner, Wm. R., St. Paul.....Com. Navy
Weaver, D. W., Greensburg.....App. M.R.C.

DEKALB COUNTY

Fanning, Frank D., Butler.....App. M.R.C.
Hines, A. V., Auburn.....Acc. M.R.C.
Hines, D. M., Auburn.....Acc. M.R.C.
Ish, E. A., Waterloo (LaOtto).....Com. M.R.C.
Kramer, A. A., Butler.....App. M.R.C.
Samuelli, Walter A., Butler.....Acc. M.R.C.
Schurtz, E. K., Waterloo.....Acc. M.R.C.
Shumaker, W. F., Butler.....Rej. M.R.C.

DELAWARE COUNTY

Bunch, Fred, Muncie.....In service
Cole, R. E., Muncie.....Applied
Green, E. S., Muncie.....In service
Green, D. R., Muncie.....In service
Kirklin, B. R., Muncie.....Applied
Mix, C. M., Muncie.....Rejected
Wright, C. H., Yorktown.....Applied
Wolf, Morris, Muncie.....M.R.C.
Tucker, O. Arnold, Daleville.....M.R.C.
Robinson, Michael, Muncie.....M.R.C.

DUBOIS COUNTY

Casper, Jos. F., Jasper.....Draft No. 9000
Gugsell, Andrew F., Ferdinand.....Acc. M.R.C.
Stark, Harvey K., Huntingburg.....Drafted

ELKHART COUNTY

Elliott, L. A., Elkhart.....Acc. M.R.C.
Hetsler, O. I., Elkhart.....Acc. M.R.C.
Simmons, L. H., Millersburg.....Acc. M.R.C.
Work, J. A., Elkhart.....Acc. M.R.C.
O'Brien, Louis T., Elkhart.....M.R.C.

FAYETTE COUNTY

Fletcher, A. J., Connersville.....Acc. M.R.C.
Osborne, Harry S., Glenwood.....Com. M.R.C.
Phillips, Wm. Robt., Glenwood, R.R. 29.....Acc. M.R.C.
Smelser, Herman W., Connersville.....Drafted and Acc.

FLOYD COUNTY

Day, Geo. H., New Albany.....Com. M.R.C.
Kinberger, Albert Glenn, Galena.....Acc. M.R.C.
Taylor, Elmer J., Greenville (Georgetown).....M.R.C.
Winstandley, Wm. C., New Albany.....App. M.R.C.

FOUNTAIN COUNTY

Beckett, Clinton G., Kramer.....Acc. M.R.C.
Bolling, Louis A., Kramer.....App. M.R.C.
Burlington, J. Roy, Attica.....Acc. M.R.C.
Little, E. O., Kramer.....Acc. M.R.C.

FRANKLIN COUNTY

Metcalf, Henry C., Laurel, R.R. 1.....Drafted and exempted

FULTON COUNTY

Waite, Earl L., Rochester.....Acc. M.R.C.

GIBSON COUNTY

Brazleton, Osborn T., Princeton.....Applied Reg. Army
Griffith, G. G., Francisco.....Draft number not yet called
Gudgel, Harry B., Princeton.....Acc. M.R.C.
Loudin, Ernest B., Hazleton.....Rejected M.R.C.
Morris, Wm. F., Fort Branch.....Acc. M.R.C.
Stephens, Olen Clarence, Fort Branch.....Rejected M.R.C.

GRANT COUNTY

Cameron, V. V., Marion.....Rej. Ambulance Ser.
Davis, Merrill S., Marion.....Acc. M.R.C.
Kimball, Glen D., Marion.....In service
Lucas, Philip H., Jonesboro.....Acc. Ambulance Ser.
McQuown, Otis W., Marion.....In service; Amb. C.
Miller, Harry, Marion.....Serving in Soldiers' Home Ser.
Peters, Chas. E., Marion.....Acc. M.R.C.
Priest, Frank Allen, Marion.....In service
Stout, Ellis Trent, Upland.....In Ambulance Ser.

GREENE COUNTY

Cook, H. S., Worthington.....Rej. M.R.C.
Deem, F. S., Solsberry.....App. M.R.C.

HAMILTON COUNTY

Haworth, Geo. Dewey, Noblesville.....Ind. Nat. Guard
Thompson, Henry H., Noblesville.....Acc. M.R.C.
Tucker, Fred A., Noblesville.....Acc. M.R.C.
Young, Edw. Milton, Sheridan.....Acc. M.R.C.
Cox, Harold B., Sheridan.....Acc. M.R.C.

HANCOCK COUNTY

Adkins, Onan Chas., McCordsville.....Acc. M.R.C.
Allen, Joseph Lee, Greenfield.....Rej. Red Cross Unit
Bruner, Chas. H., Greenfield.....Acc. M.R.C.
Clayton, Samuel D., Maxwell.....Rej.
Ferrell, Jesse Egbert, Fortville.....Applied
Gibbs, Chas. Milo, Greenfield.....App. M.R.C.
Gimmel, H. C., Greenfield.....Acc. M.R.C.
McGaughey, Carl W., Greenfield.....Rej. Red Cross
Thomas, G. B., Greenfield, R.R. 4.....Acc. M.R.C.

HARRISON COUNTY

Cutter, Chas. C., DePauw.....M.R.C.
Teaford, Benj. J., Lanesville.....Acc. M.R.C.

HENDRICKS COUNTY

Ader, Jacob, Danville.....Rejected
Grimes, Harold J., Danville.....M.R.C.
Hope, Chas. Franklin, Coatesville.....Acc. M.R.C.
Jones, Rilus E., Clayton.....Rejected
Lingeman, Edward L., Brownsburg.....Acc. M.R.C.
Royer, Elmo Ray, North Salem.....Applied
Scamahorn, Oscar T., Pittsboro.....Rej. Navy temporarily
Thixton, North Salem.....Acc. M.R.C.
Otrich, Grover C., Belleville (Clayton, R.R.).....M.R.C.

HENRY COUNTY

Arford, Rexford D., Honey Creek.....Rejected
Gordon, Virgil, Blountsville.....Draft number not yet called
Holloway, Jean Samuel, Knightstown.....App. M.R.C.
Rees, Omar H., Knightstown.....App. M.R.C.
Smith, Geo. H., Newcastle.....App. M.R.C.
Westhafer, Edson K., Newcastle.....App. M.R.C.

HOWARD COUNTY

Anderson, Thos., Kokomo.....Com. Acc.
Bannon, F. R., Kokomo.....Acc. M.R.C.
Freeman, Elbert Earl, Greentown.....Applied
Henderson, A. H., Kokomo.....Acc.
Henderson, Frederick, Kokomo.....M.R.C.
Lung, Bruce D., Kokomo.....Drafted; not exam.
Marshall, Geo. Dexter, Kokomo.....Acc. M.R.C.
Martin, Frank DeWees, Kokomo.....Rejected
Oilar, H. L., Russiaville.....Rejected N. G.; drafted
Peters, B. J., Kokomo.....Acc. M.R.C.
Ramey, John W. (colored), Kokomo.....Drafted
Thompson, B. A., Kokomo.....Acc.
Willcutts, Morton.....Applied

HUNTINGTON COUNTY

Clokey, Mitchell C., Huntington.....App. M.R.C.
Johnston, Robt. Gray, Markle.....Acc. M.R.C.
Krebs, Maurice Hill, Huntington.....In service
Thomas, Marcus H., Huntington.....In service
Wright, C. L., Huntington.....Applied

JACKSON COUNTY

Gracisle, Geo. G., Seymour.....Rej. M.R.C.
Kyte, Edwin G., Seymour.....National Guard
Matlock, Neal, Medora.....Rej. M.R.C.

JASPER COUNTY

Fyfe, M. B., Wheatfield.....Acc. M.R.C.
Hewitt, H. E., DeMotte.....Acc. M.R.C.
Johnson, C. E., Rensselaer.....Acc. M.R.C.

JAY COUNTY

Graham, Cova Roy, Briant.....Drafted; not yet called
Hiatt, E. R., Portland.....Acc. M.R.C.
Smith, Grover Allen, Briant.....Acc. M.R.C.

JEFFERSON COUNTY

Denny, Fred C., Madison.....Rej. M.R.C.
Dow, W. S., Brooksbury.....Acc. M.R.C.
Henning, Carl, Hanover.....Acc. M.R.C.
Turner, Oscar A., Madison.....Rej. M.R.C.

JENNINGS COUNTY

Daubenheyer, M. F., Butlerville.....Com. Army
Green, J. Harvey, North Vernon.....Drafted and Rej.
McFarlin, Cas. C., Zenas.....Acc. M.R.C.
Wildman, Otis, Butlerville, R.R.Acc. Navy Res.

JOHNSON COUNTY

Chenoweth, E. B., Ninevah.....Acc. M.R.C.
Good, DeWitt R., Greenwood.....Rej. Red Cross
Woodcock, Chas., Whiteland.....Drafted; not exam.
Wright, Waldo W., Edinburg.....Acc. M.R.C.

KNOX COUNTY

Ashley, Chas. W., Bicknell.....Acc. M.R.C.
Baker, Herman M., Oaktown.....Acc. M.R.C.
Curtner, M. L., Vincennes.....Acc. M.R.C.
Johnson, M. H. C., Vincennes.....Acc. M.R.C.
McCoy, J. N., Vincennes.....Acc. M.R.C.
Reese, F. L., Bicknell.....Acc. M.R.C.
Small, Emery F., Decker.....Acc. M.R.C.
Wood, Robt. S., Wheatland.....Acc. Navy Res.
Glenn, Jos. M., Vincennes.....Acc. M.R.C.

KOSCIUSKO COUNTY

Druley, G. N., North Webster.....Rej. M.R.C.
Fermier, P. G., Leesburg.....Acc. M.R.C.
Garber Paul A., Sidney.....Drafted; not exam.
Hoy, C. R., Syracuse.....Acc. M.R.C.
Murphy, S. C., Warsaw.....Com. N.G.
Young, F. J., Milford.....Acc. M.R.C.

LAGRANGE COUNTY

Grubb, Albert G., Mongo.....Acc. M.R.C.
Rozelle, Carlos C., LaGrange.....Acc. M.R.C.

LAKE COUNTY

Bicknell, Geo. F., East Chicago.....Com.; now in France
Chevigny, J. A. J., Dyer.....Acc. M.R.C.
Dewey, Edw. L., Whiting.....Acc. M.R.C.
Graham, Jos. Allen, Hammond.....Acc. M.R.C.
Hosmer, Harry Marvin, Gary.....Acc. M.R.C.
McGuire, Desmond F., Indiana Harbor.....App. M.R.C.
Merritt, Frank Waldo, Gary.....Acc. M.R.C.
Metcalf, John E., Gary.....Com. M.R.C.
Norris, Wm. N., Gary.....Rej. M.R.C.
Ostrowski, Leonard J., Hammond.....Ind. N.G.
Shanklin, Eldridge M., Hammond.....Rej. M.R.C.

LAPORTE COUNTY

Bowers, Paul E., Michigan City.....Rej. M.R.C.
Danruther, Chas. Broadway, LaPorte.....Rej. M.R.C.
Long, Victor, LaPorte.....Rejected
Maddux, Elmer D., LaPorte.....Com. M.R.C.
Maddux, M. S., LaCrosse.....Acc. Com.
Martin, H. H., LaPorte.....Commissioned
Oak, David D., LaCrosse.....In service
Osborn, Geo. Robt., LaPorte.....Acc. M.R.C.
Pinkerton, Forrest J., Westville.....In service
Simon, Arthur R., LaPorte.....App. M.R.C.; drafted, rejected
Webster, Ben, Tracy.....In service
Wilcox, Franklin T., LaPorte.....Acc. M.R.C.

LAWRENCE COUNTY

Carey, Harry K., Bedford.....Enlisted
Norman, Olin Bertram, Bedford.....Enlisted

MADISON COUNTY

Armington, John, Anderson.....Rej. M.R.C.
Fattie, J. B., Anderson.....Acc. R.C. Unit
Collins, Albert W., Anderson.....Acc. M.R.C.
Hockett, Geo. H., Anderson.....Acc. M.R.C.
Gante, Henry W., Anderson.....Acc. M.R.C.
Hunt, Lee F., Anderson.....Acc. M.R.C.
Jones, Thos. Monroe, Anderson.....Acc. R.C. Unit
McDonald, Virgil Swinn, Perkinsville.....Rej. R.C. Unit
Miley, Weit M., Anderson.....Acc. R.C. Unit
Moble, Louis F., Summitville.....Acc. R.C. Unit
Norris, Samuel C., Anderson.....Rej. M.R.C.
Stoddard, Jas. M., Anderson.....Acc. R.C. Unit
Tracey, J. Ross, Anderson.....Acc. M.R.C.
Whitledge, G. A., Anderson.....Rej. R.C. Unit

MARION COUNTY

Allen, H. R., Indianapolis.....Acc. M.R.C.
Asher, Ernest O., Indianapolis (New Augusta).....Draft No. 5105
Barcus, Clarence E., Indianapolis.....M.R.C.
Barnes, Arthur L., Southport.....Applied
Barry, Morris Joseph, Jr., Indianapolis.....Base Hosp.
Beeler, Raymond Cole, Indianapolis.....Base Hosp.
Boaz, John Jordan, Indianapolis.....M.R.C.
Bowman, Geo. W., Indianapolis.....Acc. M.R.C.
Brayton, Frank A., Indianapolis.....U.S. Ambulance C.
Brayton, Nelson D., Indianapolis.....App. M.R.C.
Button, Canada, Indianapolis.....Rejected
Campbell, Clayton C., Indianapolis.....M.R.C.
Carter, Laruc D., Indianapolis.....M.R.C.
Clark, Edmund D., Indianapolis.....M.R.C.
Coble, Paul B., Indianapolis.....M.R.C.
Converse, Ray Victor, Indianapolis.....Rejected

MARION COUNTY—Continued

Cook, Chas. J., Indianapolis.....	M.R.C.
Cottingham, Chas. E., Indianapolis.....	M.R.C.
Craft, K. L., Indianapolis.....	Acc. M.R.C.
Gregor, Franklin W., Indianapolis.....	Rejected
Gay, J. T., Indianapolis.....	M.R.C.
Doepers, W. A., Indianapolis.....	M.R.C.
Dubois, Edw. Julien, Indianapolis.....	M.R.C.
Duckworth, Jas. W., Indianapolis.....	M.R.C.
Dunning, Lehman M., Indianapolis.....	Acc. M.R.C.
Edwards, Scott R., Indianapolis.....	M.R.C.
Elfers, Chas. R., Indianapolis.....	M.R.C.
Eicher, F. I., Indianapolis.....	M.R.C.
Emhardt, John W. A., Indianapolis.....	M.R.C.
Ensinger, Leonard A., Indianapolis.....	M.R.C.
Foxworthy, Frank Wilbur, Indianapolis.....	M.R.C.
Garner, Wm., Indianapolis.....	British Hosp.
Gick, Herman H., Indianapolis.....	App. M.R.C.
Graham, Alois B., Indianapolis.....	M.R.C.
Guedel, Arthur E., Indianapolis.....	Acc. M.R.C.
Gutelius, Chas. B., Indianapolis.....	M.R.C.
Guthrie, Geo. Lewis, Indianapolis.....	M.R.C.
Habich, Carl, Indianapolis.....	M.R.C.
Hare, E. H., Indianapolis.....	App. M.R.C.
Hickman, Walter F., Indianapolis.....	App. M.R.C.
Holman, Jerome E., Indianapolis.....	Draft number not yet called
Holmes, Claud Duval, Indianapolis.....	M.R.C.
Hon, Amzi W., Indianapolis.....	M.R.C.
Hosman, F. L., Indianapolis.....	Acc. M.R.C.
Huffman, Lester Dale, Beech Grove.....	Navy
Humes, Chas. Dolph, Indianapolis.....	M.R.C.; Base Hosp.
Hurt, Paul Thos., Indianapolis.....	M.R.C.; Base Hosp.
Hutchins, Frank F., Indianapolis.....	M.R.C.
Hyde, Loren A., Indianapolis.....	M.R.C.
Itermann, Geo. E., Indianapolis.....	Nat. Guard
Jobes, Norman E., Indianapolis.....	M.R.C.
Johnson, Smith S., Indianapolis.....	M.R.C.
Jones, Clarence Kenneth, Indianapolis.....	M.R.C.
Jones, Chas. H., Indianapolis.....	M.R.C.
Jones, Homer L., Indianapolis.....	Applied
Keene, Thos. Victor, Indianapolis.....	M.R.C.
Kennedy, Bernays, Indianapolis.....	M.R.C.; Base Hosp.
Kuebler, Luke Wm., Indianapolis.....	App. Navy
Lankford, Jos. F., Indianapolis.....	Applied
Larkin, Barnard John, Indianapolis.....	M.R.C.; Base Hosp.
Leonard, Frank S., Indianapolis.....	M.R.C.
Light, Mason B., Broad Ripple.....	M.R.C.
Lochry, Ralph Landes, Indianapolis.....	M.R.C.; Base Hosp.
Ludwig, Oscar Deneen, Edgewood, Southport.....	Rej. M.R.C.
Marquette, L., Indianapolis.....	Navy
Marsh, C. A., Indianapolis.....	App. M.R.C.
Marsh, John Adam, Broad Ripple.....	Com. U.S. Navy Res.
Marshall, Augustus L., Indianapolis.....	Rejected
Martin, John Albert, Indianapolis.....	M.R.C.
Martin, Paul F., Indianapolis.....	M.R.C.
Maxwell, Leslie H., Indianapolis.....	M.R.C.; Base Hosp.
Mayfield, Clifford H., Indianapolis.....	M.R.C.
McCaskey, Geo. H., Indianapolis.....	Applied
McCulloch, Carlton B., Indianapolis.....	M.R.C.
Micheli, A. J., Indianapolis.....	Drafted
Moore, Robt. M., Indianapolis.....	M.R.C.; Base Hosp.
Morrison, Frank A., Indianapolis.....	Rejected
Mumford, Eugene B., Indianapolis.....	M.R.C.; Base Hosp.
Nimal, Harold W., Indianapolis.....	M.R.C.
Nolting, Henry F., Indianapolis.....	Draft, second call
Nusbaum, J. D., Indianapolis.....	App. M.R.C.
Page, Lafayette, Indianapolis.....	M.R.C.; Base Hosp.
Pettijohn, Blanchard B., Indianapolis.....	M.R.C.
Pettijohn, F. L., Indianapolis.....	M.R.C.
Pfaff, Orange G., Indianapolis.....	M.R.C.; Base Hosp.
Quimby, Smith, Indianapolis.....	M.R.C.
Reed, Jewett V., Indianapolis.....	M.R.C.; Navy
Ricketts, Jos. W., Indianapolis.....	M.R.C.; Base Hosp.
Rinker, Earl Bailey, Indianapolis.....	Navy
Rosenburg, John H., Indianapolis.....	Army
Rosier, Maurice, Indianapolis.....	App. Navy
Salb, John August, Indianapolis.....	M.R.C.
Scherer, Jack Walter, Indianapolis.....	M.R.C.
Segar, Louis H., Indianapolis.....	M.R.C.
Shipp, Floyd N., Indianapolis.....	M.R.C.
Sluss, John W., Indianapolis.....	M.R.C.
Smith, Jas. Madison, Indianapolis.....	M.R.C.
Sparks, Jas. Vincent, Indianapolis.....	M.R.C.
Stafford, Lindley H., Indianapolis.....	Rej. M.R.C.
Stayton, C. A., Indianapolis.....	M.R.C.
Sterne, Albert E., Indianapolis.....	M.R.C.
Storms, Roy Basil, Indianapolis.....	M.R.C.
Stowers, Jesse Linus, Indianapolis.....	M.R.C.
Strickland, Clarence R., Indianapolis.....	Applied
Sutherland, Cecil Glenn, Indianapolis.....	M.R.C.
Sumerlin, Harold, Indianapolis.....	Navy
Sweet, R. L., Indianapolis.....	Acc. M.R.C.
Thomas, Ray Henry, Indianapolis.....	M.R.C.
Thomson, G. D., Indianapolis.....	Navy
Thurston, H. S., Indianapolis.....	Navy
Tinsley, Walter B., Indianapolis.....	Drafted
Wagner, Herbert Theo., Indianapolis.....	M.R.C.; Base Hosp.
Wales, Ernest DeWolfe, Indianapolis.....	M.R.C.
Walker, Frank C., Indianapolis.....	M.R.C.
Walker, John C., Indianapolis.....	M.R.C.
Walsh, Wm. F., Indianapolis.....	M.R.C.
Ward, Joseph H. (colored), Indianapolis.....	Applied
Warfel, Fred C., Indianapolis.....	M.R.C.

MARION COUNTY—Continued

Wayman, Cecil L., Indianapolis R.R. 2.....	M.R.C.
Weer, H. L., Indianapolis.....	M.R.C.; Navy
Wentzel, Wm. S., Indianapolis.....	Army
Wells, Geo. M., Indianapolis.....	M.R.C.; retired
Weyerbacker, Arthur F., Indianapolis.....	M.R.C.
Willeford, Geo. Anson, Indianapolis.....	Applied
Willis, Edward A., Indianapolis.....	M.R.C.
Woods, Chas. Edwin, Indianapolis.....	App. M.R.C.
Worthington, J. Kent, Indianapolis.....	M.R.C.; Base Hosp.

RECENT GRADUATES OF INDIANA UNIVERSITY

Harding, Losey, Kirklint.....	Navy Res.
Mitchel, Marshall.....	Navy Res.
Murray, Dwight, Bloomington.....	Navy Res.
Thomas, A. G., Corydon.....	Navy Res.
Hildrup, Don G., Windfall.....	M.R.C.
Kent, Geo. B., Mulberry.....	M.R.C.

MARSHALL COUNTY

Denison, Raymond, Bremen.....	Acc. M.R.C.
Hardy, J. H., Plymouth.....	Acc. M.R.C.
Holtzendorff, C. F., Plymouth.....	Rej. M.R.C.
Kelly, Frank H., Argos.....	Acc. M.R.C.
Knott, Harry, Plymouth.....	Acc. M.R.C.
Marshall, Geo. Lyman, Bourbon.....	Acc. M.R.C.
Nusbaum, Chas. E., Bremen.....	Rej. M.R.C.
Preston, H. P., Plymouth.....	Acc. M.R.C.
Radcliffe, Floyd E., Bourbon.....	App. Red Cross
Tallman, H. H., Culver.....	Acc. M.R.C.

MARTIN COUNTY

Pahmeier, John W., Indian Springs, R.R. 2.....	Acc. M.R.C.
Stone, Chas. Edw., Shoals.....	Acc. M.R.C.

MIAMI COUNTY

Carter, Phineas B., Macy.....	App. M.R.C.
Line, Homer Earl, Chili.....	Acc. M.R.C.
Lynch, Otho Rees, Peru.....	Acc. M.R.C.
McClintic, Brown S., Peru.....	Acc. M.R.C.
Newell, Andrew Sutton, Converse.....	App. M.R.C.
Newell, Geo. W., Peru.....	Acc. M.R.C.
Shoemaker, Jas. Blaine, Miami.....	Acc. M.R.C.
Spooner, John P., Peru.....	Acc. M.R.C.
Taylor, Merrell H., Macy.....	Rej. M.R.C.
Van Mater, Geo. C., Peru.....	Acc. M.R.C.
Yarling, John E., Peru.....	App. M.R.C.

MONROE COUNTY

Aiken, Raymond, Bloomington.....	In service
Bobbiitt, Jas. Douglass, Bloomington.....	In Navy
Gardner, Fletcher, Bloomington.....	In service
Holland, Geo. Frank, Bloomington.....	In service
Holtzman, W. Rice, Stinesville.....	App. M.R.C.
Campbell, Jos. A., Bloomington.....	M.R.C.

MONTGOMERY COUNTY

Barcus, Paul J., Crawfordsville.....	Com. S-A War
Cary, N. Austin, Crawfordsville.....	Com. N.G.
Clements, Geo. E., Crawfordsville.....	Applied
Howard, Chester W., In camp.....	Acc.
Kleiser, A. J., Waveland.....	State Militia
Munsell, W. W., Crawfordsville.....	App. Navy Res.
Ramsey, Geo. P., Crawfordsville.....	Rejected
Rhea, James O., Linden.....	Com. M.R.C.
Sigmond, Harvey Worth, Crawfordsville.....	App. M.R.C.
Williams, Geo. T., Crawfordsville.....	Acc.
Williams, Harry Bion, Mace.....	Capt. Res. Corps

MORGAN COUNTY

Brackney, Millard F., Mooresville.....	Applied
Breedlove, G. B., Martinsville.....	Acc.
Daggy, Benj. Thos., Mooresville.....	Acc. and called
Maxwell, John H., Martinsville.....	M.R.C.; rejected
Robinson, Frank C., Martinsville.....	Major Nat. Guard
Spoor, John S., Brooklyn.....	Rejected
White, Claude H., Monrovia.....	Acc.

NEWTON COUNTY

Bassett, C. C., Goodland.....	Acc. M.R.C.
Larrison, G. D., Brook.....	Drafted and Acc.

NOBLE COUNTY

Cekul, E. C., LaOtto.....	Rej.
Goodwin, C. B., Kendallville.....	Rej.
Green, John Winston, Albion.....	Acc. Naval Res.
Hardy, Chas. Franklin, Kendallville.....	Enlisted Navy
Hussey, V. G., Ligonier.....	Applied
Johnston, Donald D., Kendallville.....	Acc. M.R.C.

OHIO COUNTY

Ford, O. P. M., Rising Sun.....	Rej. M.R.C.
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ORANGE COUNTY

Dillinger, Jos. R., French Lick.....	Com. M.R.C.
Hoggatt, W. W., French Lick.....	Com. M.R.C.

OWEN COUNTY

Bartley, Donald A., Spencer.....	In service in London
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PARKE COUNTY

Bloomer, Jos. Robt., Rockville.....Acc. N.G.
 Connelly, John J., Rockville.....Acc. M.R.C.
 Newhouse, Omar A., Montezuma.....Commissioned
 Price, Grover C., Judson.....Commissioned
 Stevens, Clark J., Rockville, R.R. 1.....Drafted; not exam.
 Swope, Raymond E., Rockville.....Acc. M.R.C.

PERRY COUNTY

Conner, D. S., Cannelton.....Com. M.R.C. 1910
 Glenn, Fred C., Tell City.....Rejected M.R.C.
 Wedding, M. F., Cannelton.....Rejected M.R.C.
 Williams, Fred Nathaniel, Tell City.....Rejected M.R.C.

PIKE COUNTY

Baker, Jas. S., Spurgeon.....In Navy
 Imel, E. S., Petersburg.....Accepted
 Kime, John T., Petersburg.....Rejected
 Taylor, D. E., Velpen.....Applied

PORTER COUNTY

Titus, John Macy, Hebron.....Com.; discharged
 Young, Simon J., Valparaiso.....Com.

POSEY COUNTY

Fitzgerald, K. C., New Harmony.....Acc. M.R.C.
 Parmenter, G., Stewartsville.....Com. Acc.
 Rawlings, C. L., New Harmony.....App. M.R.C.

PUTNAM COUNTY

Conn, W. D., Bainbridge.....Rej. M.R.C.
 Glespie, Jos. F., Greencastle.....Acc. M.R.C.
 Hutchenson, W. R., Greencastle.....Rej. M.R.C.
 Lemon, R. E., Greencastle.....Acc. M.R.C.
 Reed, David E., Russellville.....Acc. M.R.C.
 Tucker, Cassell Clark, Greencastle.....App. M.R.C.

RANDOLPH COUNTY

Reid, R. W., Union City.....Acc. M.R.C.
 Welbourn, E. L., Union City.....Applied
 Zeller, F. A., Union City.....M.R.C.

RIPLEY COUNTY

Butts, Herbert P., Pierceville.....Acc. M.R.C.
 Cox, Lafayette Thomas, Napoleon.....Acc. M.R.C.
 Holton, Chas. E., Holton.....Rej. M.R.C.
 Hunter, Tony Edward, Versailles.....Acc. M.R.C.
 Nelson, Harry Garfield, Osgood.....App. M.R.C.
 Whitlatch, Irving Alcedo, Milan.....Acc. M.R.C.

RUSH COUNTY

Green, Lowell McKee, Rushville.....Acc. M.R.C.
 Houghland, C. S., Milroy.....Acc. M.R.C.
 Tucker, Carroll J., Rushville.....Acc. M.R.C.

ST. JOSEPH COUNTY

Barber, A. E., South Bend.....Acc. M.R.C.
 Dehey, T. J., South Bend.....Commissioned
 Duggan, Chas. A., South Bend.....In service; Navy
 Hickman, J. S., South Bend.....Acc. M.R.C.
 Hillman, W. H., South Bend.....App. M.R.C.
 Hutchinson, B. M., Mishawaka.....Acc. M.R.C.
 Kuhn, Leslie A., Wyatt.....Acc. M.R.C.
 McNeel, J. E., South Bend.....Acc. M.R.C.
 Myers, E. H., South Bend.....Acc. M.R.C.
 Owen, W. L., South Bend.....Rejected
 Savery, Chas. E., South Bend.....Rej. M.R.C.
 Shanklin, R. C., South Bend.....Acc. M.R.C.
 Traver, Perry C., South Bend.....Acc. M.R.C.
 Varier, Chas. E., South Bend.....Rejected
 Snee, Harry Boyd, So. Bend.....Acc. M.R.C.

SCOTT COUNTY

Mathews, Chas. B., Lexington.....Acc. M.R.C.
 Wells, E. M.....Acc. M.R.C.

SHELBY COUNTY

Coulson, S. B., Waldron.....Acc. M.R.C.
 Cox, A. B., Morristown.....Acc. M.R.C.
 Waltermire, Tell C., Shelbyville.....Acc. M.R.C.

SPENCER COUNTY

Beidenkopf, C. J., Grandview.....Navy M.R.C.
 Glackman, John Clay, Hatfield.....Acc. M.R.C.

STEBEN COUNTY

Blosser, Blaine A., Fremont.....App. M.R.C.
 Humphreys, Frank Blair, Angola.....Acc. N.G.
 Lame, W. H., Angola.....Acc. M.R.C.
 Ransom, Glen D., Hamilton.....Acc. M.R.C.
 Swantusch, Otto H., Metz.....Acc. M.R.C.

SULLIVAN COUNTY

Crowder, Joe R., Sullivan.....Rej. M.R.C.
 Dukes, Frederick M., Dugger.....Rej. M.R.C.
 Gill, Ira J., Dugger.....Rej. M.R.C.
 Higbee, Paul, Sullivan.....Acc. M.R.C.
 O'Dell, Harry, Farmersburg.....Acc. M.R.C.
 Scott, Garland D., Sullivan.....Acc. M.R.C.

SWITZERLAND COUNTY

Dodd, D. W., Vevay, R.F.D.....Acc. Navy
 Hall, Wesley Marion, East Enterprise.....Acc. M.R.C.
 Shadday, Alva, Vevay.....Acc. Navy Res.

TIPPECANOE COUNTY

Arnett, A. C., Lafayette.....In Army
 Clapper, M. M., Lafayette.....Acc. M.R.C.
 Griest, O. E., Lafayette.....App. M.R.C.
 Lee, Geo. W., Lafayette.....Acc. M.R.C.
 McCoy, O. L., Romney.....Acc. M.R.C.
 McClelland, D. C., Lafayette.....Capt. N.G.
 Mitchell, R. S., West Point.....In Army

TIPTON COUNTY

Chance, B. V., Windfall.....Acc. Com.
 Leeson, E. E., Goldsmith.....Acc. Com.
 Mozingo, A. E., Tipton.....Acc. Com.
 Moser, E. B., Windfall.....Acc. Com.
 Reagan, L. M., Tipton.....Acc.
 Recobs, R. M., Tipton.....Acc.

UNION COUNTY

Hawley, Paul R., College Corner, Ohio.....Com. M.R.C.
 Hawley, W. H., College Corner, Ohio.....Applied

VANDERBURG COUNTY

Bretz, Ross R., Evansville.....Acc. M.R.C.
 Cleveland, Walter Ravlin, Evansville.....Rej. M.R.C.
 Cox, Jos. B., Evansville.....Acc. M.R.C.
 Dyer, Wallace C., Evansville.....Acc. M.R.C.
 Folsom, E. M., Evansville.....Acc. M.R.C.
 Hewins, Marvin W., Evansville.....Acc. M.R.C.
 Huber, John G., Evansville.....M.R.C.
 Laubscher, Samuel R., Evansville, R.F.D.....Acc. M.R.C.
 Magenheimer, Edgar F., Evansville.....Drafted and Acc.
 Miller, Minor W., Evansville.....Rej. M.R.C.; then drafted
 Rose, Ben S., Evansville.....Acc. M.R.C.
 Walden, Reavill M., Evansville.....Acc. M.R.C.
 Whitledge, Herbert E., Evansville.....M.R.C.

VERMILION COUNTY

Ashby, Chas. N., Clinton.....Acc. M.R.C.
 Beller, Frank McHarry, Clinton.....Acc. M.R.C.
 Casebeer, I. M., Newport.....Acc. M.R.C.
 Johnson, Wm. Alex, Dana.....App. M.R.C. and drafted
 Myers, Wm. C., Dana.....Acc. M.R.C.
 Saunders, Jones Lindsey, Newport.....Acc. M.R.C.

VIGO COUNTY

Alexander, Oliver Ostrum, Terre Haute.....Acc. Com.
 Barbazette, L. F., Terre Haute.....Acc. M.R.C.
 Carpenter, Geo. Chester, Terre Haute.....Acc. Com.
 Combs, Chas. Nathan, Terre Haute.....Red Cross Unit
 Combs, Malachi R., Terre Haute.....Com. Acc.
 Crawford, Wm. Grisby, Terre Haute.....Rej. M.R.C.
 Danner, R. J., West Terre Haute.....Acc. M.R.C.
 Duenweg, Rudolph, Terre Haute.....Acc. M.R.C.
 Freed, John E., Terre Haute.....M.R.C.
 Fortune, C. M., Terre Haute.....Acc. Com.
 Gillum, John Randolph, Terre Haute.....T.H. Red Cross
 Hutchings, Byron Merle, Terre Haute.....Rej. M.R.C.
 Jett, Frank Hubert, Terre Haute.....R. C. Unit
 Johnson, Geo. Thompson, Terre Haute.....Com. Acc.
 Mutch, Melchard Helmer, Terre Haute.....Acc. Com.
 LaBier, Clarence Roland, Terre Haute.....Acc. Com.
 Layman, Ernest W., Terre Haute.....Rej. U. S. Navy
 Mitchell, Albert M., Terre Haute.....Acc. Naval Res.
 Mulliken, Hugh Methes, Terre Haute.....Rej. M.R.C.
 Panek, A. F., Terre Haute.....App. M.R.C.
 Pierce, H. J., Terre Haute.....Red Cross Unit
 Shanklin, Vernon A., West Terre Haute.....Rej. M.R.C.
 Shores, E. M., Terre Haute.....Acc. Com.
 Siebenmorgan, L., Terre Haute.....Rej. M.R.C.
 Stunkard, Thomas C., Terre Haute.....Acc. Com.
 Weinstein, Jos. H., Terre Haute.....Red Cross Unit

WABASH COUNTY

Beaman, Zera Merritt, Urbana.....Acc. M.R.C.
 Domer, Walter A., Wabash.....Acc. M.R.C.
 Higgins, J. B., LaFontaine.....Rej. M.R.C.
 Jewett, Lawrence Emmett, Wabash.....Acc. M.R.C.
 Kidd, Jas. Gordon, Roann.....Acc. M.R.C.
 Walker, James Lynn, LaFontaine.....Acc. M.R.C.
 Whisler, Frederick M., Wabash.....Acc. M.R.C.

WARREN COUNTY

Stephenson, Richard, West Lebanon.....Acc.

WARRICK COUNTY

Raibourn, R. L., Lynnville.....App. M.R.C.
 Sample, J. Tilden, Boonville.....Commissioned
 Spradley, L. G., Tennyson.....U. S. Secret Service

WASHINGTON COUNTY

Zink, Clyde M., Salem.....Acc. M.R.C.

WAYNE COUNTY

Craig, Jos. Sherman, Richmond.....Acc. M.R.C.
Darrow, Frederick L., Richmond.....Acc. M.R.C.
Fisher, J. M., Centerville.....Acc. M.R.C.
Grosvenor, Julius J., Richmond.....Acc. U. S. Pub. Health R. C.
Goodman, Abram R., Richmond.....Acc. M.R.C.
Goran, Thos. P., Richmond.....Acc. M.R.C.
Hays, Geo. Robinson, Richmond.....Rej.
LaBonte, Napoleon, Richmond.....Acc. M.R.C.
Markley, Stephen C., Richmond.....Acc. M.R.C.
Morrow, Roy D., Richmond.....Rejected

WHITE COUNTY

Coffin, Guy R., Monticello.....Acc. M.R.C.
Coyner, Alfred Bruce, Chalmers.....Drafted; not exam.
Cray, Arthur B., Monticello.....Capt. N.G.
Goodwin, U. G., Monticello.....Rej. M.R.C.
McBeth, Walter, Burnetts Creek.....Acc. M.R.C.
Rariden, L. Bradley, Brookston.....Acc. N.G.

WHITLEY COUNTY

Eberhard, Fred G., South Whitley.....Com. M.R.C.
Grisier, Otto W., Columbia City.....Com. M.R.C.
Pence, Benj. F., Churubusco.....Acc. M.R.C.
Souder, C. L., Columbia City.....Com. M.R.C.

CORRESPONDENCE

CLINICAL DIAGNOSES CHECKED BY
AUTOPSIES

MASSACHUSETTES GENERAL HOSPITAL
BOSTON, OCTOBER, 1917.

Editor THE JOURNAL:

For some years it has been the custom at the Massachusetts General Hospital to manifold each week the clinical records of the cases autopsied that week, and to discuss them with a group of students and graduate physicians. We read the clinical history, commit ourselves to the best diagnosis we can make, and then ask the pathologist to tell what was found. Older physicians who used to attend these exercises have written asking that papers like that herewith enclosed might be sent to them by mail, so that by reading through the history, making their own diagnosis, and then turning over the sheet to learn the postmortem result, they might get some of the same training in diagnosis that is furnished us each week at the hospital.

For two years the hospital has been conducting such a course by mail and it has met with the approval of several hundreds of physicians. The course includes four printed cases each week, three autopsied and one non-autopsied of which the enclosed is a sample.

In several cities both in and outside Massachusetts, printed cases like that enclosed have been used at the meeting of district medical societies, as a basis for a profitable diagnostic and therapeutic discussion. This makes unnecessary the preparation or reading of set papers, and sometimes furnishes a very interesting evening. In other places, small groups of men have met for discussion of the cases without any more formal organization.

For the benefit of the large number of doctors who are entering the government service, efforts will be made during the period of the war to issue some typical cases from the military and naval hospitals and concentration camps, with discussions by physicians and surgeons in the army and navy service. These cases will be chosen with a special view to illustrating successful therapeutics.

The subscription is \$5 a year, payable in advance; 50c extra for foreign postage.

Checks should be made payable to the Massachusetts General Hospital.

Yours very truly,

FREDERIC A. WASHBURN,
Resident Physician.

SOCIETY PROCEEDINGS

THE EIGHTH INDIANA DISTRICT
MEDICAL SOCIETY

The regular meeting of the Eighth Indiana District Medical Society was held at Muncie, Thursday, October 18, in the High Street M. E. church, with President W. A. Hollis of Hartford City in the chair.

First on the program was a splendid address by Will C. Moore of Summitville on the "Treatment of Infected Wounds in the War." Dr. Moore had been a member of a hospital unit located in Austria. The subject was discussed by Drs. Schmauss, Kemper, Wadsworth, Martin, Caylor and Mix.

At noon an excellent dinner was served by the W. H. M. S. of the church.

At 1:30 H. H. Wheeler of Indianapolis spoke on "Chronic Constipation." The address aroused an animated discussion led by Drs. Gronendyke and Kemper.

At 2:30 C. M. Mix read a paper on "Visceral Syphilis," portraying some of the numerous lesions and ramifications of this terrible and prevalent disease. Discussants: Caylor, Schmauss and Cole.

The officers elected for the coming year are: president, C. Melvin Mix; vice president, L. F. Schmauss; secretary-treasurer, H. D. Fair. The next meeting will be held at Muncie the third Thursday in October, 1918.

H. D. FAIR, Secretary.

CARROLL COUNTY

Carroll County Medical Society met at Flora, September 14, with fourteen members present.

Prof. Walter D. Hoskins of Indianapolis was present and talked to the society on the subject of Infant Feeding. Some of the points brought out were as follows: Prepare the breasts before the child is born. Feed the baby every three hours, but only one breast should be used at a feeding. Let mothers eat anything they want. Feed mothers generously from the start if you want plenty of milk. Cows' milk the best substitute when breast milk not obtainable.

The attendance at this meeting was 50 per cent. of the membership, and from 50 to 65 per cent. has been the average for the past year. All speakers for this year have been out-of-county guests.

Adjourned.

W. R. QUICK, Secretary.

MADISON COUNTY

Madison County Medical Society met October 23, at 4 p. m., in Public Library at Anderson, with Doris Meister, vice president, in the chair.

Dr. George G. Richardson of Van Buren addressed the society on the subject, "The Doctor's Relation to the World's War." He told of conditions as he found them in a recent visit to New York and other camps, and said that in war the doctors and Red Cross nurses are looked on as the angels of the earth. There are no pro-Germans—either a true American or a German. Dr. B. H. Cook of Anderson said Dr. Richardson's statements corroborated the description of conditions as reported by his two sons now in the war.

The subject was discussed generally.

Adjourned.

SETH IRWIN, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

HALAZONE - ABBOTT.—Parasulphonedichloramido-benzoic acid. It is said to act like chlorine and to have the advantage of being stable in solid form. In the presence of alkali carbonate, borate and phosphate it is reported that halazone in the proportion of from 1:200,000 to 1:500,000 sterilizes polluted water. Halazone is used for the sterilization of water in the form of Halazone tablets, each containing 0.004 Gm. halazone mixed with sodium carbonate and sodium chloride. The Abbott Laboratories, Chicago (*Jour. A. M. A.*, Oct. 6, 1917, p. 1166).

CAMIOFEN OINTMENT.—An ointment obtained by mixing iocamfen (a liquid obtained by the interaction of iodine 10, phenol 20 and camphor 70 parts) with an equal weight of a lard-wax-oil of theobroma base, but containing nearly all of its iodine in the combined form. It has the properties of fatty iodine compounds, phenol and camphor, and is used in skin diseases. Schering and Glatz, New York (*Jour. A. M. A.*, Oct. 20, 1917, p. 1343).

PROPAGANDA FOR REFORM

SOME MISBRANDED NOSTRUMS.—The following nostrums have been the subject of prosecution by the federal government under the Food and Drugs Act: DeWitt's Eclectic Cure, containing alcohol, opium and ether—DeWitt's Liver, Blood and Kidney Cure, essentially a water-alcohol solution bearing a cathartic drug, together with Epsom salt, nitrates and iodids. —Lightning Hot Drops, containing 60 per cent. alcohol and 48 drops of chloroform to the ounce, as well as ether and capsicum. —Mother's Salve Mother's Remedy, a salve consisting of petrolatum, with some glycerin, potassium chlorate and oils of cloves, cinnamon, eucalyptus, sassafras and pine or juniper. —Raney's Blood Remedy, a solution of potassium iodid and mercuric chloride in syrup of sarsaparilla with 16 per cent. alcohol. —Rattlesnake Oil Liniment, White Eagle Indian Rattlesnake Oil Liniment, containing little or no "rattlesnake oil." —

Rosadalis, essentially a water-alcohol solution containing potassium iodid and a cathartic drug (*Jour. A. M. A.*, Oct. 6, 1917, p. 1192).

ZIRATOL.—The Council on Pharmacy and Chemistry reports Ziratul, sold by the Bristol-Myers Company, New York, ineligible to New and Nonofficial Remedies (1) because its composition is secret; (2) because the phenol coefficient is not stated on the label; (3) because its use by the public as a "vaginal douche" is advised, and (4) because the claim that Ziratul is the "Universal disinfectant" is unwarranted. The A. M. A. Chemical Laboratory reported that the preparation is a soap solution containing alpha-naphthol as its essential constituent (*Jour. A. M. A.*, Oct. 6, 1917, p. 1191).

GONOSAN.—The Council on Pharmacy and Chemistry reports that Gonosan, sold by Riedel and Co., Inc., is in the form of capsules said to contain oil of sandalwood and kava resin advertised for the treatment of gonorrhea (as indicated by the name). It declared Gonosan inadmissible to New and Nonofficial Remedies because the therapeutic claims are exaggerated; because there is no evidence that the combination of kava resin with oil of sandal is superior to oil of sandal alone, and because the therapeutically suggestive name is conducive to indiscriminate and unwarranted use of the combination both by the profession and by the public (*Jour. A. M. A.*, Oct. 13, 1917, p. 1287).

ALCRESTA IPECAC.—This preparation of ipecac was admitted to New and Nonofficial Remedies in 1915. Recently claims have been advanced for this preparation which were not contemplated at the time of its acceptance and which appeared improbable and unwarranted in the light of the known properties of ipecac. The Council on Pharmacy and Chemistry brought these extravagant claims to the attention of Eli Lilly and Co., the proprietors of Alcresta Ipecac. As Lilly and Co. would neither discontinue nor modify these claims and did not submit any evidence to warrant them, the Council announces that it has been obliged to delete this proprietary from New and Nonofficial Remedies (*Jour. A. M. A.*, Oct. 20, 1917, p. 1373).

HEPATICO TABLETS.—The Council on Pharmacy and Chemistry reports that Hepatico Tablets (David Laboratories, Inc.) are claimed to "contain a combination of bile salts, pepsin, pancreatin, ext. nux vomica and cascara," and that in their exploitation the same therapeutic nonsense is made use of as that used in connection with two preparations of similar claimed composition, namely, Veracolate and Taurocol, previously reported on by the Council. The Council declares the therapeutic claims made for Hepatico Tablets unwarranted, the name objectionable and the combination of ingredients irrational (*Jour. A. M. A.*, Oct. 20, 1917, p. 1374).

SOME MISBRANDED NOSTRUMS.—The following "patent medicines" have been declared misbranded under the U. S. Food and Drugs Act: Sherman's Compound Prickly Ash Bitters, containing 20 per cent. alcohol, buchu and an emodin bearing drug. —"Thorn's Compound Extract of Copaiba and Sarsaparilla," a mixture of copaiba and sarsaparilla extract. —"Tarrant's Compound Extract of Cubebs and Copaiba," a mixture of copaiba and cubeb extract. —V. I. G., an aqueous solution of glycerin, morphin, berberin, hydrastin and salicylic acid (*Jour. A. M. A.*, Oct. 20, 1917, p. 1374).

Pituitary Liquid

½ cc ampoules 1 cc ampoules

The ideal preparation of the kind.

Entirely free from preservatives and objectionable chemicals.

Standardized by the Roth method.

For obstetrical cases, ½ cc ampoules.

For surgical work, 1 cc ampoules.

Corpus Luteum

Guaranteed from true substance. Powder, 2 and 5 grain capsules and 2 grain tablets.

Literature to physicians on request.

ARMOUR AND COMPANY
CHICAGO

1667



Parathyroids—
Powder and Tablets, 1-20 grain.
Red Bone Marrow—
(Medullary Glyceride) Hema-
togenetic, Histogenetic.
Kephalin—
10-gramme packages.
Elixir of Enzymes—
Digestant and palatable vehicle.
Pineal Substance—
Powder and Tablets, 1-20 grain.
Pituitary, Anterior—
Powder and Tablets, 2 grain.
Pituitary, Posterior—
Powder and Tablets, 1-10 grain.

THE ACTIVE PRINCIPLE OF THE HYPOPHYSIS.—Despite the suggestion obtained from certain advertising claims, the active principle of the pituitary gland has not been isolated in a pure state. An examination of commercial preparations showed that proteoses and possibly peptones were present in all (*Jour. A. M. A.*, Oct. 27, 1917, p. 1431).

HAINES' GOLDEN TREATMENT.—This is sold by the Golden Specific Co., Cincinnati, Ohio, as a cure for the liquor habit, which may be administered without the knowledge of the patient. The directions which accompany the three dollar package imply, however, doubt as to the probability of success unless the patient is anxious to be cured of the habit and takes the powders knowingly. The A. M. A. Chemical Laboratory reports that this worthless nostrum consists of powders which are composed essentially of milk sugar, starch, capsicum and a minute amount of ipecac (*Jour. A. M. A.*, Oct. 27, 1917, p. 1460).

BOOK REVIEWS

SANITATION FOR MEDICAL OFFICERS. By Edward B. Vedder, M.D., Lieutenant-Colonel, Medical Corps, U. S. Army. Illustrated. Cloth, \$1.50. Lea & Febiger, Philadelphia and New York, 1917.

This little handbook is intended for the use of army medical officers as a guide to them in their sanitary work. The subject matter contained therein is presented in condensed and concise form, so that although the volume contains about 200 pages it is

small enough to be carried in a pocket of the officer's uniform. Such a handy manual on sanitation is really needed and desired by nearly all army physicians. That it will meet with a tremendous popularity and an enormous demand is a foregone conclusion.

NOSTRUMS FOR KIDNEY DISEASES AND DIABETES. Prepared and issued by The Propaganda Department of *The Journal of the American Medical Association*. 47 pages; deals with 34 nostrums; illustrated. American Medical Association, 535 North Dearborn St., Chicago. Paper, 10 cents postpaid.

This is the latest pamphlet issued by The Propaganda Department of *The Journal of the American Medical Association* as part of its work in giving the medical profession and the public the facts regarding different phases of the nostrum evil and quackery. Nostrums for kidney disease and diabetes are grouped together in one pamphlet, not because there is any essential relation between diabetes and kidney disease, but because the average quack makes no distinction between the two conditions and recommends his nostrum indiscriminately for both. It is not necessary to tell physicians that drugs will not cure either kidney disease or diabetes but it is necessary to apprise the public of this fact. Whatever justification there may be for the sale of home remedies for self-treatment, there is no excuse, either moral or economic, for selling preparations recommended for the self-treatment of such serious conditions as diabetes and kidney disease. Every "patent medicine" sold for the cure of these diseases is potentially dangerous and inherently vicious. The pamphlet is an interesting and instructive one to put in the hands of the layman.

DISEASES OF THE SKIN. By Richard L. Sutton, M.D., Professor of Diseases of the Skin, University of Kansas School of Medicine; Dermatologist to the Christian Church Hospital, etc. With 833 illustrations and 8 colored plates. Second edition, revised and enlarged. Cloth, \$6.50 net. St. Louis: C. V. Mosby Company, 1917.

A second edition appearing only one year after the first testifies to the popularity of this work. The author has taken the opportunity to give in this new edition some additional matter, as well as to include the important contributions appearing during the past year, and to eliminate some typographic and other minor errors. A most striking feature of this new edition is the addition of 140 new illustrations. Since they are of the greatest importance in the presentation and teaching of dermatology the value of this book as a clinical text has been enhanced considerably.

The new edition has helped to maintain the reputation of this work as one of the best texts on the diseases of the skin to be had at present. The author may rest assured that his new work will "be found to fill a need in modern dermatologic literature."

OBSTETRICS. A Textbook for the Use of Students and Practitioners. By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital. Fourth enlarged and revised edition. With seventeen plates and six hundred and eighty-five illustrations in the text. Cloth. New York and London: D. Appleton and Company, 1917.

In the five years which have elapsed since the appearance of the last edition of this work enough progress has been made in the field of obstetrics to make a new edition necessary. Indeed, the author points out that "these changes have necessitated a thorough revision of the book, with the result that not a single chapter and scarcely a page remains as it was."

Textual changes have been made in subjects too numerous to give in detail, and many minor changes have been introduced. The original form of the volume, however, has been left unchanged.

The author directs particular attention to the "somewhat iconoclastic views expressed concerning the value of complicated chemical methods in determining the prognosis and treatment of pre-eclamptic toxemia and eclampsia." This feature is quite characteristic of this author, and is one of the prominent elements responsible for the wide popularity of himself and his work.

By bringing this work up to date the author has succeeded in maintaining its reputation as one of the foremost—if not the foremost—text on obstetrics to be had at present. His hope that "it will continue to prove useful to physicians and medical students" will be fully realized.

THE PRESCRIPTION, THERAPEUTICALLY, PHARMACEUTICALLY, GRAMMATICALLY AND HISTORICALLY CONSIDERED. By Otta A. Wall, Ph.G., M.D., Professor of Materia Medica, Pharmacognosy and Botany in the St. Louis College of Pharmacy; Member of the Committee for Revision of the Pharmacopoeia of the United States, 1880-1890 and 1890-1900. Fourth and revised edition. Price \$2.50. St. Louis, C. V. Mosby Company, 1917.

This is the fourth edition of a well-known book, though it has been largely rewritten and amplified to make it more attractive as well as more compre-

hensive. It goes without saying that a book of this kind is invaluable to the student as well as the practitioner of medicine and the pharmacist. A working knowledge of prescription writing is not possessed by many doctors if we are to judge by the character of some of the prescriptions sent to pharmacists. And, as the writer says, "correct prescription writing is to the physician what elegant clothes are to the gentleman, or a handsome frame to a fine painting." He further says that "it is but fair to assume that the physician who is neat, careful, and correct in writing his prescriptions is also careful and painstaking in the examination and treatment of his patients; while he who is careless and slovenly in writing his prescriptions will probably allow the same characteristics to prevail in the treatment of his patients."

Of especial value in this fourth edition is the section on the use of the metric system in prescribing, and easy methods of acquiring the ability to write correct prescriptions of this kind are thoroughly explained.

We have no hesitation in recommending the book, for, as the publishers well say, it sets forth clearly and distinctly everything connected with the subject, and probably is the most scholarly presentation of it in print.

NUTRITION AND CLINICAL DIETETICS. By Herbert S. Carter, M.A., M.D., Associate in Clinical Medicine, Columbia University; Associate Attending Physician to the Presbyterian Hospital; Consulting Physician to the Lincoln Hospital, New York; Paul E. Howe, M.A., Ph.D., Assistant Professor of Biological Chemistry, Columbia University, New York; and Howard H. Mason, A.B., M.D., Instructor in Diseases of Children, Columbia University, New York; Associate Attending Physician to the Presbyterian Hospital; Attending Physician to the Ruptured and Crippled Hospital, New York. Cloth \$5.50. Lea & Febiger, Philadelphia and New York, 1917.

The combined efforts of an internist, a biological chemist, and a pediatrician in presenting a new textbook on the subject of nutrition and clinical dietetics have yielded a result that is, indeed, splendid from every point of view.

The subject matter is given in four parts. Part I deals with foods and normal nutrition. Part II takes up the question of foods. Part III discusses feeding in infancy and childhood, and Part IV feeding in disease. A chapter is devoted to food protection, accessory foods, and beverages. The last chapter gives the table of food values, weights and measures.

This volume contains a mine of information which is of very great value to the practitioner. The subject of nutrition is growing in importance from year to year, and there is obviously a very close association between it and the subject of dietetics. In order to treat intelligently many types of diseases nowadays the clinician must know how to answer properly the questions of nutrition and diet that come up so frequently. There is no better book at present to which to go for such information than this new volume. Here the physician will find just what he needs as regards nutrition, metabolism, foods, and dietetics in their relation to both health and disease. The subject is presented and treated in a plain and very clear manner so that it can be followed and understood by any physician of average training and intelligence. Such a book can be assured of a very hearty welcome into the ranks of the foremost texts of the present day.

During Infancy and Childhood it is important but difficult to keep the bowels in order. It can be done by the continued use of

Liquid Petrolatum Squibb Heavy (Californian)

It is pure and safe, tasteless and odorless. Because it is neither a laxative, a cathartic, nor a purgative, but a perfect mechanical lubricant, is not absorbed by the system and does not disturb digestion, it may be given indefinitely in any necessary quantity. Thus it prevents intestinal toxæmia, restores normal action of the bowels, and aids in maintaining normal nutrition. Especially valuable for young patients during the summer and autumn months.

To be had at all drug stores in original one-pint packages under the Squibb label and guaranty.

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CONTENTS

SYMPOSIUM		PAGE	EDITORIALS		PAGE
Diagnosis of Diseases of the Gallbladder. A. C. Kimberlin, M.D., Indianapolis		457	Significance of the Widal Reaction		474
Diseases of the Gallbladder; Medical Treatment. Charles R. Sowder, M.D., Indianapolis		460	Opponents to Advances in Medical Science		474
Ladder Surgery. H. H. Martin, M.D., F.A.C.S., Fort Wayne		463	Editorial Notes		476
Stectomy vs. Cholecystotomy. H. A. Duemling, D., Fort Wayne		466			

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPT. 25, 26, 27, 1918.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

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CONTENTS—Continued

SOCIETY PROCEEDINGS		MISCELLANEOUS	
	PAGE		PAGE
Bartholomew County Medical Society.....	488	Deaths	478
Benton County Medical Society	488	News Notes and Personals.....	479
Madison County Medical Society.....	488	Correspondence	487
Posey County Medical Society.....	488	The Truth about Medicines	488
Tiptecanoe County Medical Society.....	488	Book Reviews	490
		Index to Volume X.....	493

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Next Annual Session, Indianapolis, September 25, 26 and 27, 1918

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SYMPOSIUM

DIAGNOSIS OF DISEASES OF THE GALL-BLADDER *

A. C. KIMBERLIN, M.D.
INDIANAPOLIS

There are two outstanding features in connection with gall-bladder disease. One is correct diagnosis, and the other is treatment, which is very largely surgical. One is directly dependent upon the other because of the fact that the medical man as well as the surgeon must have some idea of the pathology. Also the surgeon should know, either directly or indirectly through the medical man, something of the history of the case, which determines in a very large measure the kind of pathology that he is going to have to deal with. Consequently, these cases, perhaps more than any other we have, are borderline cases, and at once full of interest both to the medical man and the surgeon.

We have recently changed our ideas very considerably as to the manner in which the infection reaches the gall-bladder. This has been brought about by a better knowledge of pathology. Originally, we were told by our teachers that it was an infection ascending through the ducts which found its way to the bile accumulated in the gall-bladder and there infection of the mucous membrane took place. We know of at least two very good reasons now why that is not true, or if it is true, it is certainly an unusual occurrence. To begin with, the origin of the common duct from the duodenum comes from perhaps the most sterile part of the whole intestinal tract, that part of the intestinal tract in which the bacterial flora is almost negligible in a state of health. The best evidence is the frequency with which surgeons find the compli-

cation of ulcer together with disease of the gall-bladder itself. The second is the fact that now pathologists know that in its incipency infection of the gall-bladder does not primarily involve the mucous membrane. It begins in the sub-mucous tissue, and its ravages sooner or later reach the surface and we then have what is called a true cholecystitis. Consequently, one is forced from both sides to accept the theory that an infection of the gall-bladder in most instances is carried through the blood stream. There is still better evidence when we come to analyze the source of infection, which may have its origin in remote parts of the body. We know that one of the commonest conditions which gives us disease of the gall-bladder is typhoid fever. We know now that typhoid is a blood stream infection purely, without regard to where it gains its entrance. We know it is no uncommon thing to find lesions of the gall-bladder and kidneys following typhoid. As a source of infection we know that no organ, and especially the gall-bladder which is the most frequently infected of all organs, are exempt from the invasion of the infection having its origin in these remote places in the body.

Another argument is the fact that infection of the gall-bladder, disease of the gall-bladder is perhaps a better way to put it, is not very unlike that of tuberculosis. It was not long ago that we spoke of tuberculosis as being primarily a disease of the pulmonary tissue. Now we know that this is not true. Incipient tuberculosis is a disease of childhood; gall-bladder disease is one of early adult life. Clinically, it comes late, after the fortieth year, and the fiftieth and sixtieth year gives us our big per cent.; but when the pathologist has finished his analysis, when a careful survey of the clinical history has been made, and a study of the etiological cause, we recognize the fact that our infection took place long ago, yes, twenty or thirty years ago, certainly before the age of 35, has the infection

* Presented before the Evansville Session of the Indiana State Medical Association, September, 1917.

been planted in this tissue which later, of course, showed itself in the form of what we recognize as disease or infection of the gall-bladder. So it is a latent infection, it is a chronic infection, it is distributed through the blood or lymph stream very largely, and is primarily not confined to the surface of the mucous membrane. These are essential facts in the diagnosis and treatment.

Now let us look at a few of the clinical symptoms. Perhaps one of the most difficult things we have to do is to differentiate gall-bladder disease from other conditions which are found involving the upper abdomen. We generalize with a lot of these, perhaps too much so, but we group these cases together in our minds very quickly and block them out, and then begin more detailed analysis, which is not a very bad procedure in the diagnosis of diseases of the gall-bladder. Then we have ulcers of the duodenum and chronic appendicitis complicating disease of the gall-bladder. Rare, but too common, and when it does come lets one down with more force than anything I have had to do with, is disease of the cardiovascular system, with strong physical signs of gall-bladder disease due to portal stasis. It may seem like begging the question to say that there is any relationship whatever between the differential diagnosis of disease of the gall-bladder and that of the cardiovascular system, but where we have a biliary stasis, a certain degree of toxemia, a mild infection that you cannot locate, when the patient is toxic in appearance and rather anemic, almost cachectic, when the heart is not telling very much of this, then you begin a careful analysis of these clinical symptoms, and I might say it causes a good deal of doubt as to which is which, whether it is a local disease or a local manifestation of a general condition. I have seen more than one case, and one just recently, prepared for operation, that unfortunately died suddenly, but the autopsy revealed a gall-bladder that was absolutely normal, and he had nothing but a diseased myocardium, yet that patient was jaundiced, had local pains and tenderness, and pylorospasm so often seen in cases of cardiovascular and renal disease. At times it is very difficult to accurately differentiate between pylorospasms and those of gall-stone colic. That is one thing I want to emphasize, because they come in the same age—between 40 and 60—when men and women are most susceptible, clinically, to the invasions of disease.

There remains one other condition which we should always keep in mind, and that is syphilis. Syphilis of the liver, syphilis of the gastrointestinal tract and of the nervous system must always be kept in mind. The gastric crises of tabes closely resemble in their symptoms some phases of gall-bladder disease. Syphilis of the nervous system, of the liver, syphilitic ulcer or a gumma of the stomach may have true periodicity, may have pain and all the characteristics of diseases of the gall-bladder. So do not forget the syphilitic cases.

The physical findings—how much importance will we attach to the physical findings? How many cases of gall-bladder disease give you local manifestations of its presence? You might say comparatively few. If we could just forget what we have been told when we were students—those of my age, at least—about the diagnosis of gall-bladder disease, we would make fewer mistakes. However, that early teaching in medicine is so hard to efface that we all still keep a few things uppermost in our minds about gall-bladder disease. One is that there is a certain periodicity about it that is very essential. Another is that there must be some local tenderness present. I have known some very good surgeons that never operate for gall-stones unless they find local tenderness. Now the medical diagnosis and the surgical diagnosis of conditions involving the upper abdomen may be very widely different, as the surgeon gets a few definite things and sticks to them. They get a few things that must be positive in making a diagnosis. So do not be misled by the absence of tenderness. It does not need to be there. It may never have been there, or it might be quite conspicuous.

Another symptom is jaundice. I know we were taught that jaundice is always present. Jaundice does not occur in one half of the cases that are subjected to surgery, much less those that are missed, and I am sure that we miss more than we find, at least in the practice of medicine; and I suppose the surgeon finds some form of gall-bladder disease almost as often when he is not looking for it. But do not think jaundice must be present at all. It is not the rule that it is present.

The next thing is pain—the characteristic pain that we are supposed to know belongs to diseases of the gall-bladder, the intense pain which we call hepatic colic. You may have spasms of the pylorus, and the chronic nephritic is especially predisposed to have spasms of his

pylorus, and in these subjects it is sometimes very easy to feel the contraction of the pylorus. In these cases of disease of the gall-bladder you have identically the same happening as in reflexed pylorus spasm, with retention of food, gas, pain and disturbed digestion, all of which could also come from organic disease of the gall-bladder itself. So while it is easy enough to make a diagnosis in some cases, it is not so easy in others, and do the best you may you are sure to make some mistakes.

I want to speak of one feature more, and that is the question of complications. Complications may rule out all these diagnostic pictures I have mentioned above. The vagaries of gall-bladder disease are many. Everyone who has had to do with gall-bladder disease knows that as soon as he gets complications then your clinical picture is destroyed. You take a large stone that does not enter the duct or cause pain, and you have a set of symptoms, the outstanding feature of which is chronicity and persistence. It is continuous, there is not the periodicity so characteristic of gall-bladder colic. The trouble may be attributed to something far removed from the gall-bladder. Consequently, when you have to do with a gall-stone colic, you can expect an entirely different clinical picture than when you have one large stone, or stones too large to engage the neck of the bladder. The same thing is true perhaps when you have complications in the form of peritonitis.

I was much impressed by what Dr. Duemling said in regard to cholecystotomy. This is a much better operation so far as morbidity is concerned, and it becomes a matter of considerable concern to the family physician and consequently to the diagnostician to have a voice in the kind of operation that a given patient should have done. The surgeons should not criticize the medical men too severely in making the wrong pathological diagnosis, because the surgeons frequently have great difficulty in determining the pathology with the open abdomen.

It is well to keep in mind that not all gall-bladders containing stones have disease of the mucous lining, or infected bile, as Deaver found quite a percentage in which the bile was quite sterile. But the point I wish to make is that if the surgeon with the open abdomen and a view of the structures is in doubt as to the best method of procedure, you can understand how difficult it is for the medical man to carefully analyze his clinical findings and history to the point where he might say to a given patient that

he should or should not have his gall-bladder operated, a question frequently asked of the medical adviser. While it may not be of much value to the surgeon it oftentimes determines whether a minor case will be operated or not, as to many laymen removal of the gall-bladder is looked upon as a very hazardous procedure.

I do not agree with Dr. Duemling about recurrences. Stones do recur, or reform, oftentimes around the suture.

As to the roentgen ray in diagnosis. The roentgen ray is wonderful, it is indispensable in diagnosis, but at times it has made more trouble in the management of my cases of gall-bladder disease than it has done good. I say this with the greatest deference to the men engaged in this kind of work. Take men like Dr. Cole—we could not get along without him. Nothing causes me to lose my persuasive influence over a patient with suspected disease of the gall-bladder as a negative roentgen-ray finding, as the layman still thinks that a negative finding is conclusive, and unfortunately, too, many roentgenologists claim too high a percentage of positive findings. While it is very true that calcified stones will show in the roentgen ray, the cholesterin formations, which are by all odds the most frequent, do not show in the roentgen ray at all. The Mayos have adopted a plan which I think is a very good one. With them the roentgen ray is a matter of routine, which it should be, but is not permitted in private practice because of the expense and inconvenience. The Mayos roentgen ray and then operate independent of the findings. At least, that is what they were doing a year ago. So what I say concerning the diagnosis of gall-bladder disease I say about gall-stones, and I do not mean to discredit or depreciate the efforts of those men in aiding to make a correct diagnosis, for when it is quite positive it does show stones; but unfortunately, the statistics range from 5 per cent. to 96 per cent. of positive findings. It depends on the individual and how much enthusiasm he is enjoying at the time.

I want to emphasize the fact that we should pay more attention to the pathology, and one reason why we do not prove to be of more help to the surgeon is the fact that we do not give sufficient attention and time to a careful study and analysis of the clinical history. This is paramount above all, and in the diagnosis of gall-bladder disease still stand, we might say, the king pin.

DISEASES OF THE GALLBLADDER

MEDICAL TREATMENT *

CHARLES R. SOWDER, M.D.
INDIANAPOLIS

I have chosen to consider only those diseases of the gallbladder in which medical treatment has a distinct part. Malignancy and other conditions, which may arise from obstruction stricture of the cystic duct or by compression from neoplasms without or within, belong entirely to the surgeon. It is, perhaps, a mooted question whether all diseases of this organ do not belong to our surgical friends.

From the standpoint of treatment then, there is primarily only one disease of the gallbladder to consider, viz., infection, because cholecystitis of whatever type or degree, plus the sequelae cholelithiasis has its origin in the one thing, infection plus favorable conditions for their more or less continued development.

The classifications of cholecystitis are more for the purpose of designating the extent of pathological changes than to form a basis for treatment. Gangrenous, phlegmonous, purulent, catarrhal are terms which we must understand express virulence of infection with corresponding degrees of inflammatory reaction rather than calling forth any special treatment except that suggested by the gravity of the case.

In the consideration of treatment then, such terms are in the main unnecessary with the one exception perhaps that the recognition of the pathological changes will determine our course with reference to the surgeon.

The relative frequency of gallbladder disease, 5 to 10 per cent. of all human beings examined at autopsy, certainly suggests a fertile field for the practice both of medicine and surgery. Cholelithiasis cannot be considered apart from cholecystitis, as it practically always depends on the existence of the latter at an earlier period in the patient's history. In any event, bacteriemia of the gallbladder must have been present.

The important thing after all, then, is the recognition of gallbladder disease. This necessitates a working knowledge of the symptoms and their variations, as a large percentage of gallbladder infection does not present a classic picture. In addition, we must practice frequent and painstaking physical examination, not of the

look at your tongue and feel your pulse type. Cultivate a discriminating judgment that we may in the light of all facts determine when to call surgical aid. The mere calling of the surgeon at some time in the patient's illness when all other measures have failed does not release us from previous responsibility nor discharges our full obligation. I confess that it is not always an easy matter to determine when to do this, but when in doubt the counsel of a conservative surgeon is not a thing to be despised.

In this period of our medical history our patients are looking more and more to preventive medicine, and this is as it should be. I can conceive of no better way to build up and hold a generous clientele than by a solicitous interest on the part of the physician to keep his patients out of trouble, and proper education will yield its competence as well.

In the care of the gallbladder, preventive treatment should have a prominent part. It is not my purpose to discuss here the correction of predisposing factors such as cardiac conditions, tight lacing, over-eating, obesity and sedentary habits, etc., but rather to emphasize the necessity for active preventive treatment during the course of and following acute infectious processes, which in the light of recent researches we have determined must furnish the active cause. These other things simply prepare the soil and maintain cultivation.

It is not unreasonable to expect, that if we can maintain a normal flow of healthy bile and by medicinal measures tend to keep the gallbladder sterile that we have taken a long step forward in the prevention of gallbladder disease. In addition, we should give a diet calculated to demand a minimum amount of work on the liver. I would not attach as much importance to the character of this diet as I would to its quantity. The patient needs a well balanced ration. Determine for your patient his physiological needs and the liver will not lie down on the job. Give exercises designed to develop the abdominal muscles, which will compress and change the position of the abdominal viscera, thus facilitating the flow of bile and emptying of the gallbladder. Such exercises may vary from the more simple ones of bending the body till the fingers touch the toes, of movements of the upper half of the body in various positions with the two hands compressing the upper abdominal zone, or lying on the back — elevating the limbs a number of times, or the more pretentious ones of golf, horseback riding or rowing.

* Presented before the Evansville Session of the Indiana State Medical Association, September, 1917.

Women possess gallstones two to five times more frequently than men, and we can safely ascribe the lack of proper exercise as the deciding factor. Sediment never settles in running water. So much then for exercise and diet. As to medicinal aids in maintaining a normal biliary secretion both as to consistency and amount, I know of nothing better than pure alkaline waters—such as French Vichy, either the natural water or the cheaper artificial salts. Salicylic acid and its compounds, together with the bile salts, are our best hepatic stimulants. Sodium salicylate, in doses of 10 to 15 grains daily, is of value, but I prefer the bile salts in form of sodic glycocholate, 10-gr. doses, two or three times a day; or the more elegant proprietary formulas containing bile salts with menthol and salicylic acid.

To aid in rendering a gallbladder sterile and maintaining it so we so far have only one drug on which reliance can be placed, namely, hexamethylenamin, or under the trade name urotropin. It has been shown that this drug is capable of rendering the gallbladder sterile. I desire to emphasize the necessity of giving it in every case of acute infection and especially during typhoid fever. Give 15 to 20 grains daily, two days out of each seven, and 10 grains daily for six months after convalescence is established. If this were done after all infectious processes I believe that we would have much less disease of the gallbladder. It is to be understood that regular daily evacuation of the bowels is essential to continued normal activity of the liver.

Treatment of Acute Conditions. — I believe that the great majority of acute low grade inflammatory conditions of the gallbladder go untreated, the symptoms not being severe enough to cause the patient to seek medical help and sometimes not severe enough to cause the doctor to suspect the nature of the trouble. In those cases seeking relief—rest in bed is the first essential. Gentle laxatives such as petroleum oil or olive oil, or a low enema being usually sufficient. I would warn you against drastic physics at any time, and especially calomel. I believe many cases are made worse by the injudicious use of cathartics.

Pain and distress incident to the disease should preferably be allayed without resorting to opiates. If they become necessary, codein in small doses is preferred. Morphin may mask a rapidly developing phlegmonous or gangrenous bladder, or a possible rupture, until too late for efficient relief. We had best depend on hot

moist packs or the icebag, although there are some objections to the latter, as it not infrequently obtunds the local area, and we may be unable to localize tender areas. This, however, may be overcome by a hot moist pack applied for a few minutes before examination. Hexamethylamin should be given in divided doses, 20 to 30 grains daily—alkaline waters administered in copious quantities, normal salt solution by bowel if the stomach will not tolerate liquids. The leukocyte count should be taken daily and any considerable increase over normal should cause us to call surgical aid.

Within the past two weeks I have had occasion to observe two cases which point to the necessity of careful study.

Mr. H., age 52, farmer, was sent to the hospital with a diagnosis of appendicitis. Temperature 99.6. Family history negative. Personal history—had been a moderate drinker of beer and whisky for several years, but had quit their use five years ago. Had the usual diseases of childhood, and typhoid fever in early life. Present illness began several weeks ago when he was taken with pain in stomach radiating downward, becoming rather intense over entire abdomen. Attack was accompanied by rise in temperature and tympanitis. The attack subsided but still had pain and soreness in region of stomach. Present attacks began with same symptoms and conditions as previous one. The temperature varied from 99 to 101. The abdomen was markedly tympanitic and sore to touch over entire abdomen. Leukocytes, 15,000. Petroleum oil, 4 ounces, was given by mouth; warm saline enemas used to facilitate emptying of bowels, and hot turpentine stupes applied for twenty-four hours at which time the tympanitic condition had disappeared and a more thorough examination could be made. All tenderness over the abdomen had disappeared except an area over the region of gallbladder the size of palm of the hand. The gallbladder was not palpable. A diagnosis of acute recurring infectious cholecystitis and pericholecystitis was made, and the patient was referred to the surgeon. Operation revealed a gallbladder containing 4 ounces of pus; no stones; culture of contents gave strepto- and staphylococci. Patient recovering.

Mrs. P., age 26. Family history negative. Personal history: had typhoid at 3 years and usual diseases of childhood; one child, five years ago, at which time was sick in bed three months. Had not been well since, having suffered with stomach trouble and vague abdominal symptoms. On admission abdomen was distended, slight rise in temperature. The tympanitic con-

dition prevented thorough physical examination, leukocytes 13,500. Practically the same treatment as in the preceding case. In twenty-four hours the abdomen was flat, and examination revealed soreness over the gallbladder and two inches below ensiform cartilage and to right of median line. A diagnosis of duodenal ulcer, near or quite perforated with associated chronic gallbladder disease, was made. Roentgen-ray findings showed flattened, contracted area $1\frac{1}{2}$ inches below pylorus and duodenal ulcer was confirmed. Immediate operation was advised and accepted. Findings: A gallbladder containing about 3 ounces of bile and a single stone the size of a marble, and on the posterior surface of the duodenum and inflammatory area $1\frac{1}{4}$ inches in diameter, which was probably caused by infection from the gallbladder. Result: prompt recovery and relief of symptoms.

These two cases are presented to show first the unusual pain paths, both being downward and spreading over the entire abdomen. The value of leukocyte count—as any marked increase practically always means infection outside of gallbladder, and when present suggests the futility of further medical treatment except as a preparation for surgical measures.

The treatment of chronic cholecystitis involves somewhat different procedures and may be combined in discussion at least with chronic cholelithiasis. The two are almost always associated, the latter an accompaniment of the former. The success of treatment will depend on our ability to render the gallbladder sterile, except, of course, in the presence of stones and such treatment will prove of value here by preventing further formation of stones. You will recall the prophylactic treatment, restoration of normal biliary flow and biliary antisepsis.

To increase the biliary flow a number of drugs are employed, although only a few are of any real value. Daily doses of alkaline waters are of value. Sodium phosphate in one or two dram doses in a glass of hot water on arising. Sodium salicylate in daily doses of 20 to 30 grains, or sodic succinate 20 grains daily, or sodium (choleate or) glycocholate in divided doses 30 grains daily. Sodium salicylate is often objectionable because of its tendency to disturb the stomach and to produce tinnitus aurium. Sodium succinate markedly increases biliary secretion. Sodic cholate or glycocholate has the added value of influencing the duodenal secretions as well as the biliary. From experience with piperazin in a large number of cases I have come to value it highly. Its action is due to the stimulating effect on the mucous glands of

the gallbladder and ducts, facilitating the passage of bile. It should be given in $7\frac{1}{2}$ -grain doses three times daily in a full glass of water—preferably in artificial vichy water. Its cost precludes its use except by the well-to-do.

At this time I desire to call attention to the injury being done by the promiscuous prescribing of saline waters by the profession and of their taking, without advice, by the laity. There are no better stimulants to normal biliary secretion than the normal bile salts. Sodic and tauro glycocholate are absorbed as the intestinal contents pass downward, and being taken up by the portal circulation act upon and are eliminated again by the liver. I desire now to enter a vigorous protest against the waste of nature's biliary stimulant by continual and senseless washing of the intestinal tract with salines. I have frequently encountered patients who for a year or two past have in the early morning preceded the washing of the face with a dash of saline laxative at the intestinal tract, and who went about their daily rounds wondering why the pink had left their cheeks and elasticity their step.

I desire again from the standpoint of biliary antisepsis to emphasize the value of hexamethylamin taken through a long period of time. So-called solvents of gallbladder stones are absolutely of no value. Because of its hold on the lay mind olive oil treatment of cholelithiasis should be mentioned. I have simply this to say, that those who are benefited by its use have in addition to the gallbladder disease a duodenitis, which the oil in a measure relieves, and perhaps this reflexly affects the gallbladder kindly. It has one advantage over many other remedies, it can do no harm. I have already indicated by implication at least when our friend the surgeon should be called in acute cholecystitis. In view of the discussion which will follow this symposium, I do not believe that I am departing at least from the intent of my subject if I take what may be the medical man's only opportunity to say a few words about when to call the surgeon in cholelithiasis. As stated in the beginning, this is a mooted question open to friendly debate. 1. All will agree that the first or any subsequent attack of gallstone colic may be the last, as the victim may pass the only stone present. 2. Cholelithiasis has a tendency to become latent as evidenced by post-mortem examination, although we admit the fact that very few possessors of gallstones escape without some symptomatology. 3. Properly treated,

many cases of cholelithiasis live for years with comparatively little inconvenience. It is a question whether the inconvenience would justify submitting to operation with its attendant risks. 4. Gallstones as a cause of cancer of the gallbladder are a negligible quantity because of its relative infrequency compared to the whole number of gallstone carriers.

When then should the surgeon be called and medical treatment cease? I am speaking strictly of the gallbladder and not of stones in the hepatic or common duct. We can lay down no hard and fast rule to guide us, as we must be guided by the facts presented by the case. In general, if we have an obstruction of the cystic duct resulting in enlargement of the gallbladder to a considerable degree surgical aid should be sought. Or if repeated attacks of pain or disturbances of digestion interfere with the patient's comfort to a marked degree or renders him unable to follow his usual vocation, surgical aid should be given. All cases of cholelithiasis in which are recurring attacks of cholecystitis or pericholecystitis should be subjected to immediate surgical interference. In all cases where acute cholecystitis can be ruled out I believe that at least six months' medicinal treatment should be instituted before considering surgical measures.

GALLBLADDER SURGERY *

H. H. MARTIN, M.D., F. A. C. S.
LAPORTE

Accustomed as we are to the many and frequent advances taking place in the science of medicine and surgery, it seems almost incredible that the teachings and practice of one man could dominate medical activities for over fourteen centuries.

Galen,¹ considering the period in which he lived, was a keen observer and a clear analyzer. Many of his deductions of necessity were erroneous and, in the face of present knowledge, seem all but humorous. But as we consider the handicaps under which the world was laboring at that time, his accomplishments were really wonderful. Dissections of the human body were prohibited both by the church and state, consequently his dissections were limited entirely to the lower animals. It was he who

taught — and his teachings were accepted by all until the beginning of the seventeenth century — that the liver was the seat of the mind, that it made the blood and that the veins had their origin in it.

Until Harvey,² in 1616, proved the circulation of the blood, it was thought that the blood passed directly from the right to the left side of the heart through small valves or openings. It was not until this period that dissections on the human body were being practiced by the more bold.

Soon after Harvey's discovery Tselli, in 1622, discovered the thoracic duct, and Perquet, in 1674, discovered the lacteal vessels. Due to these discoveries, Galen's theories were attacked by Vasalius, Benivieni and Fallopius, and to a certain degree overthrown.

This period witnessed the laying of the real foundation for later scientific medicine. The world was just emerging from under that stagnating load of superstition and fear. Men bold enough to defy both church and state — which had restricted man's activities in all directions except war — were occasionally beginning to appear. The fact that Voltaire a few years later, regardless of his revolutionary teachings, was allowed to continue with his head is but an indication of this wonderful advancement.

We find that it was during this period that the first successful removal of gallstones was recorded in 1622,³ and the first successful cholecystectomy was performed upon a dog in 1630. This operator's conclusions — that the common duct dilates after the removal of the gallbladder, but that the animal lived and survived fully as well without the organ as it did with it — have again been verified within the last year by Judd⁴ and Mann.⁴

Regardless of these experiments and proven facts, gallbladder surgery, as all other abdominal surgery, received but slight consideration until after the practical demonstration of the anesthetic effect of ether at the Massachusetts General Hospital, Oct. 16, 1846, and the proven relationship existing between micro-organisms and disease by Davaine in 1863.

From 1687 to 1742, as a result of accidental injury to the abdominal wall, involving the gallbladder, gallstones were successfully removed three times.⁵ Müller's case, which was reported

2. Referred by Frericks. *Clinical Treatises on Diseases of the Liver*. Translated by Murchison. Printed by William Wood & Co.

3. Referred by Langenbach. *Verhandl. d. deutsch. Gesellsch. f. Chir.*

4. *Surg., Gynec. and Obst.*, April, 1917, xxiv, 437.

5. Referred by Langenbach. *Verhandl. d. deutsch. Gesellsch. f. Chir.*

* Presented before the Indiana State Medical Association at Evansville, September, 1917.

1. Referred by Frericks. *Clinical Treatises on Diseases of the Liver*. Translated by Murchison. Printed by William Wood & Co.

in 1742, led Petit to devise and successfully carry out an operation for the removal of gallstones from a greatly distended gallbladder which he had determined was adherent to the abdominal wall.

Block, in 1774, reasoned that it was the adhesions that favored the successful operation, so in three cases he applied caustic potash over the gallbladder, and after the tissues had been destroyed down to the gallbladder, he opened them and allowed them to drain.



Fig. 1.—A removed gallbladder showing early interstitial and mucous membrane changes, but no stone. This is the type that so often disappoints, following a cholecystectomy.

Bobbs⁶ of Indianapolis, in 1867, while operating upon what he considered to be an ovarian cyst, discovered a greatly distended gallbladder, and after stitching it to the abdominal wall, allowed it to drain. This was the first successful cholecystotomy recorded, and to Bobbs is given due credit for its execution.

Kocher,⁷ in 1878, did a two-stage operation; that is, he opened the abdomen and packed Lister's gauze about the gallbladder, and six days later drained it.

However, it was not until Langenbach,⁸ in 1882, after many experimental operations upon cadavers and animals, successfully performed his first cholecystectomy, and the operation popularized by Courvoisier, that gallbladder surgery began to receive the consideration due it.

At this time the gallbladder was considered the organ responsible for the formation of gallstones. Therefore, its removal was advocated and practiced by many.

This theory was soon superseded by the one that claimed that the infection took place through the common duct, and that the bile thus infected was responsible for the formation of gallstones, and Spencer Wells⁹ operation,

known as ideal cholecystotomy, came into quite general practice.

In 1888 Bevin¹⁰ published an accurate and extensive review of the anatomy of the gallbladder region, together with an incision offering a better approach. This incision, founded as it is upon true anatomical considerations, has withstood the test of practice, and is still being utilized by more surgeons than any other incision with which we are familiar.

In 1900 Summers,¹¹ before the American Surgical Association, read a paper dealing with the gallbladder in cholecystotomies. He advocated inverting the cut edges of the gallbladder about a tube placed for the purpose of drainage, and stitching the gallbladder peritoneum to the parietal peritoneum. His technic proved of great value, as it eliminated the possibility of a remaining, constant biliary fistula, which up until that time was a frequent and an annoying complication.

Before the surgical section of the American Medical Association¹² the same year Dr. Wm. J. Mayo advocated the removing of the mucous membrane of gallbladders in those cases where the pathology was extensive, and the condition of the patient such that a cholecystectomy would be considered hazardous. This operation never proved popular, and to my knowledge was never extensively practiced in any institution outside of Rochester.

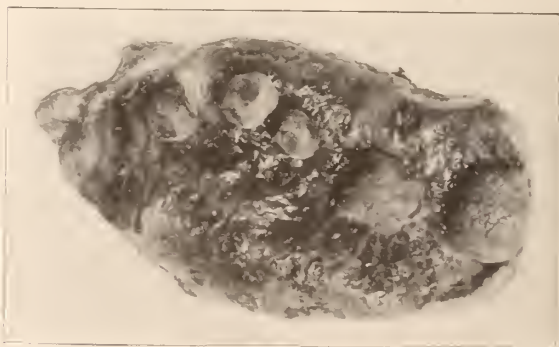


Fig. 2.—A removed gallbladder showing marked interstitial and mucous membrane changes. Musculature as well as mucous membrane having been destroyed and replaced by scar tissue. This gallbladder contained a number of stones and several necrotic areas, one of which extended through the gallbladder wall into the liver substance.

This was the real formative period of biliary surgery. Kehr, before the German Surgical Congress¹³ meeting in Berlin in 1900, reported 491 operations upon the gallbladder and ducts.

6. Tr. Ind. Med. Assn., 1867.

7. Kocher's Operative Surg., ii, 530.

8. Referred by Monyhan. Gallstones and Their Surgical Treatment, p. 346.

9. Referred by Langenbach. Verhandl. d. deutsch. Gesellsch. f. Chir.

10. Ann. Surg., xxx, 13.

11. Philadelphia Med. Jour., 1900.

12. Philadelphia Med. Jour., June, 1900. A Review.

13. German Surgical Congress, Philadelphia Med. Jour., June, 1900. A Review.

Two hundred and two of his operations were cholecystotomies, 104 cholecystectomies and 105 combined bladder and duct operations. His mortality rate was 3.04 per cent. He failed to relieve 15 per cent. of his cases.

Loebker stated at the same meeting that the gallbladder, whether acutely or chronically infected, should be removed, the same as the appendix.

At the American Medical Association meeting at Atlantic City in June, 1900, Means of Cleveland made a plea for early gallbladder operations, claiming that an early operation would reduce the mortality rate in the same proportions that early operations had reduced the mortality

Ricketts of Cincinnati was in accord with Richardson, and A. J. Oschner favored Mayo's operation in suitable cases. He also stated that every fatal case was due to delay.

In 1901, Halstead¹⁴ published that he was able to clinically produce pancreatitis by forcing bile directly into the pancreatic duct.

In 1903 Opie¹⁵ reported that he was able to produce fatal pancreatitis by injecting pure bile into the pancreatic duct. And Flexner,¹⁶ the same year, stated that if the bile was first al-

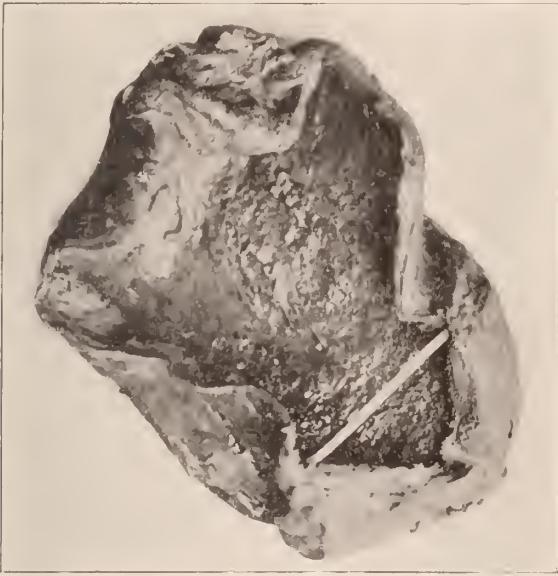


Fig. 3.—Gallbladder showing marked pathological changes as a result of a chronic cholecystitis. This gallbladder contained no stones. The patient, a female, 62 years of age, gave a history of chronic cholecystitis covering a period of over thirty years.



Fig. 4.—Photograph of the gallbladder removed from a female patient, age 73, who for over fifty years had taken morphine to relieve pain centering principally in the right scapular region. When the Harrison law went into effect, we placed her in the hospital and succeeded in relieving her of her life long habit. She continued an invalid and was classed as a neurasthenic. At stated intervals she would run a temperature accompanied with chills, which was very suggestive of a chronic malaria. At no time, over a period of fifteen years, did I ever elicit any tenderness over the gallbladder, or did she ever have any pain referred to that region. Finally owing to the periodicity of her symptoms and after eliminating all other possible sources of infection, we decided to surgically investigate the gallbladder, which was found to contain relatively large number of small stones. Upon dissection of the gallbladder, after removal, it was found to be made up of three separate and distinct pockets, each of which contained stones. The patient now at the age of 75 is able for the first time in many years to assist with her household responsibilities. Her pain is entirely relieved.

rate in appendicitis. He had operated twenty cases, with a mortality rate of 15 per cent.

Richardson of Boston reported 100 cases, with a mortality rate of 13 per cent. He also made a plea for early operation; as did Wyeth of New York.

Senn of Chicago, stated that he believed, in the hands of experts, that we had a certain means of diagnosis in the roentgen ray. He was not in favor of removing the mucous membrane of the gallbladder (Mayo's operation), and was in favor of operating only to save life.

Marcy of Boston was in favor of early operation. Deaver of Philadelphia stated that too ultra-conservatism was a dangerous doctrine. He had never seen gallstones diagnosed by means of the roentgen ray.

lowed to mix with the mucous of the gallbladder, that the bile lost much of its toxicity.

These statements added materially to the already existing chaotic condition, and it was not until Rosenow¹⁷ published the results of his ex-

14. Bull. Johns Hopkins Hosp., xli, 1901.

15. Jour. Exper. Med., 1901, v, 27.

16. Contributions to Medicine. Dedicated to William H. Welch, 1901.

17. Jour. Am. Med. Assn., Nov. 13, 1915, p. 1687.

perimental work on gallbladder infections that the profession began to realize the limitations of simple drainage of the gallbladder, and to appreciate the cause for so many surgical failures in those cases where success was legitimately anticipated. Crile¹⁸ at one time attempted to attribute these failures to be due to faulty technique, and Guster to a condition described by Naunyn as cholangitis.

Regardless of these and many other explanations, they all failed to explain until Rosenow proved that in the majority of cases, and probably in all, the infection takes place by the way of the circulation direct, and that it is the gallbladder walls, and not the bile or the gallbladder mucous membrane, primarily involved. Consequently simple drainage, regardless of method or time, fails to relieve many of these cases.

I beg your indulgence while I quote from two men taking part in a symposium on Cholecystotomy vs. Cholecystectomy¹⁹ at the Philadelphia meeting of the Clinical Congress of Surgeons in 1916. Dr. Deaver stated that from the standpoint of end-results, infected conditions of the biliary tract were best treated by removal of the gallbladder. Sixty-five per cent. of his failures he attributed to the non-removal of this organ. He also stated that in over 1,800 operations on the biliary passages, he had not met with a single case of dilated amputated cystic duct, and that he was inclined to believe that this reported condition was based upon the false conclusions of the few and accepted by many.

Dr. Charles Mayo, in summing up the results at the Mayo Clinic, stated the cures following cholecystotomy to be 53 per cent., as against 71 per cent. following cholecystectomy. In giving the results of eleven months from November, 1915, to October, 1916, he stated that there had been performed at the Mayo Clinic fourteen cholecystotomies, with a mortality rate of 14 per cent.; and for the same period there had been performed 716 cholecystectomies, carrying a mortality rate of 1.007 per cent.

From our review of the literature, plus our observations of the result of the work of other surgeons, plus our own experience, we now believe that every pathological gallbladder demanding operative interference should be removed, providing this operation does not add to the mortality rate of a cholecystectomy over a cholecystotomy.

CHOLECYSTECTOMY VS. CHOLECYSTOTOMY *

H. A. DUEMLING, M.D.

FT. WAYNE

In considering the operations upon the gallbladder and its ducts, it is not wholly uninteresting to pay some attention to the development of this special discipline. Particularly so, as we are all too prone to overlook or minimize the efforts of those who have traveled the roads of science before us.

Gallstones have been removed with a certain measure of success for three hundred years, with infinite patience on the part of the surgeon, and no doubt with great pain to the unhappy patient. Escharotic preparations were spread over the gallbladder region until firm adhesions had formed between parietal peritoneum and gallbladder. Through this conglomerate of gallbladder, liver, colon, etc., the surgeon was enabled to remove the stones and create a biliary fistula. Not many cases are recorded, perhaps because the diagnosis of stone was then as now uncertain, and the method employed for the removal of stones painful and not constant in permanent results.

Years elapsed before our own Bobbs performed the first successful and premeditated cholecystotomy. Improvement now came rapidly. The study of the steps taken in the search for the ideal operation constitutes the argument for both the cholecystotomy and cholecystectomy. Right here I wish to state that in my opinion both operations are valuable, i. e., some cases require simply incision and drainage, while others as certainly must have the gallbladder removed to regain health. But to come back to our subject: The true escharotic method was displaced by the attachment by sutures of the gallbladder to the parietal peritoneum—a cleaner, safer and more certain method, made possible by antisepsis. Yet no doubt this method was copied consciously or unconsciously from the old escharotic method.

For a short time the operation of cystendesis was practiced. The gallbladder was opened, the stones removed and the organ sutured shut and returned to the abdominal cavity. Many patients died of peritonitis superinduced by leakage of bile. All surgeons will agree with me that it is next to an impossibility to positively close a gallbladder wound except the cystic duct is closed by stricture or stone. So this method

18. Surg., Gynec. and Obst., 1914, xviii, 429.

19. Surg., Gynec. and Obst., xxiv, 3, 281.

* Presented before the Evansville Session of the Indiana State Medical Association, September, 1917.

fell into bad repute and was discontinued to make way for Poppert's "waterproof" tube drainage as we often employ it today. This method permitted the surgeon to treat the small and shrunken bladder, which could not be brought close enough to the parietal peritoneum for suture. This marks the climax for the surgery of stones of the gallbladder.

The surgeon of that day operated for stones, or at most for virulent infection, and we all remember the embarrassment and chagrin of the surgeon, family doctor more important, the disgust of the patient and his friends, when no stones were found. I do not want any doctor to come to my operating room to see an operation for stones. I do not operate for stones, but for a well defined pathology of the gallbladder sometimes accompanied by the formation of stones. That is the reason why we should be very careful in obtaining the history of the patient, so that we can make a diagnosis of gallbladder disease. Stone can be diagnosed positively only when stones have been found in the feces, or have been vomited.

Remember, too, in this connection, that patients are not cured by scientific examinations, but by scientific treatment, so that you do not overdo that which if used reasonably is of such great value. It was just this exact taking of the history and the careful study of the post-operative behavior of the patient which allowed the rapid progress of gallbladder surgery. The drainage of the gallbladder and the removal of stones was demonstrated to fall short in certain cases. Patients would return with colic, or would present themselves with external fistula. It was then that the fable of "recurrence of stone" was evolved.

I do not believe that there is a single case of true recurrence of stone in existence, nor ever was. If this could be true theoretically, then certainly this occurrence is so rare as to be utterly negligible. No! stones do not reform, but they are overlooked! This fact led first of all to the exploration of the ducts—a tremendous step forward. At first the cystic duct was relieved of stone if present, and the restless finger of the surgeon began to explore the common and hepatic ducts.

A new operation appeared—choledochotomy.

But yet the postoperative histories were not altogether clear of failures to cure. And now came the knowledge that the stone did not constitute the disease of the gallbladder or its ducts. The stone is but the result, not always even present, of infection of the gallbladder,

carried to it by the general circulation, so that oftentimes stones are found quite embedded in the gallbladder wall. It became evident, therefore, that the simple removal of the stone could not effect a cure unless something was done to effect a cure of the condition responsible for its formation. Drainage, sometimes prolonged for months, was successfully used in many cases, but always a few remained which resisted all treatment.

Finally the removal of the gallbladder was advised by some American and British surgeons, and soon reports on cholecystectomies were seen in our journals. This operation found its greatest champions in Langenbuch and Hans Kehr, and it was the latter who advocated so persistently the exploration of the common duct by sight, i. e., splitting the duct open, and the introduction of the T tube. He also insists that every case must be thoroughly drained. The operation of cholecystectomy, with drainage of the ducts, has brought us to the present time in the progress of treatment of gallbladder disease. No doubt the restless and never satisfied mind of the observer and student will carry us still farther, for we have not yet reached the goal.

Now Lessing, the great German poet, says, "Argumentation is the father of Truth," and in presenting the indications for both cholecystotomy and ectomy I hope to stir up just that argument which will bring us nearer the goal of perfection.

There is a great difference between a gallstone carrier and a patient who has gallstone disease. No doubt a great many individuals go through life with a few hundred stones in the gallbladder and never become conscious of their presence. These are mere carriers, but they carry a dangerous cargo. Occasionally such carriers, because of slight symptoms, come to operation. A simple incision of the gallbladder, the removal of the stones, exploration of the ducts and finally the "waterproof" drainage, completes the case. In this case the gallbladder is not materially damaged and will promptly recover; the case is clearly not one for ectomy. Many cases present a moderate severity of inflammation; drainage will suffice in most of these instances.

But the great majority of cases coming to the surgeon present an entirely different picture. To bring these before you in few words I will give the indications which, in my opinion, are best treated by ectomy.

1. Phlegmonous cholecystitis.
2. Empyema of the gallbladder.
3. Chronic cholecystitis with shrunken and thickened gallbladder walls.
4. Hydrops.
5. Extensive injury of gallbladder.
6. Carcinoma if limited to gallbladder.

All these indications come under the general heading, "Disease of the Gallbladder Wall." C. H. Mayo says, cholecystotomy and the removal of the stones will cure symptoms of mechanical obstruction, but will not cure chronic cholecystitis and cannot restore the destroyed wall of the gallbladder or free it from adhesions. He advises cholecystectomy for these and all cases in which infection is the major feature, with or without stones. This view is reflected in the Mayo statistics. Formerly there were very few ectomies, while now there are very few cases of cholecystostomy. The ratio is almost exactly reversed.

The contraindications for ectomy are few. Most operators mention as the first one, inexperience of the operator or anesthetist. This observation in my humble opinion holds good for the operation in ingrowing toenail as well as for cholecystectomy. Who would subject his patient for any operation to either the inexperienced operator or careless anesthetist? The desperate condition of the patient is given as a contraindication. I would not attempt ectomy in the very obese, because of inability to make a clear field for operation. Stenosis of the common duct is a contraindication. Pancreatic disease is given by Frazier, Deaver, Mayo and Crile. Finally, I believe ectomy is contraindicated on patients who have already had a major operation, e. g., a hysterectomy. Yet after all, there are cases which tax the surgeon's judgment greatly. As Deaver says, "The question often makes Hamlets of us all."

The technic embodies certain points which I would like to mention. First, and most important, do not attempt an ectomy unless you have a perfect exposure of the field. The incision must begin at the tip of the xiphoid, traverse the rectus and curve downward and be sufficient to absolutely guarantee a free exposure. Contrary to common teaching, I advise you to begin your dissection from the fundus toward the duct. The cystic duct is often hidden under a pouch-like distention of the neck of the gallbladder and frequently curves around the common duct. In a number of instances the common duct has been severed under the impression that the cystic duct was ligated. Beginning the ectomy by ligation of duct is therefore

dangerous. The claim that hemorrhage is lessened by the primary ligation of the cystic artery is false. I never have blood to contend with, although I ligate the vessel after the gallbladder is thoroughly freed from its liver bed. While the gallbladder should never be used as a tractor, it yet serves as a valuable guide to the safe identification of the common duct. Always ligate the cystic artery separately, then cut the duct and note whether pus or stones escape. Explore with probe or finger the common duct, or cut the duct open.

Always provide drainage. If the common duct has not been opened attach the drainage tube to the ligature controlling the cystic duct. Do not allow yourself to believe that the ligature will prevent bile leakage — if the ducts are free, as they should and must be, there will be a discharge of bile, however dry the field may have been at the time of operation. It is a waste of time and effort, moreover absolutely unnecessary, to close the peritoneum of the gallbladder bed in the liver. The peritoneum will cover the raw surface from which the gallbladder has been peeled just as promptly as the kidney capsule reforms after an Edebohls' operation — more quickly if you refrain from tearing it and the liver by sutures. Adhesions here as elsewhere are prone to form. Therefore, gentleness in the use of sponges and instruments is necessary. Adhesions to pylorus and duodenum because of the change in the shape of these organs due to their filling and emptying are very painful and annoying. It is wise to put a small protected drain just up to and into the foramen of Winslow. The ordinary toilet of peritoneum and wound completes the operation.

The last word has not been spoken in regard to the merits of one operation or the other. Hans Kehr said he did not expect to use the knife any longer when the question of ectomy vs. cystotomy was finally settled. A prophetic word, for Hans Kehr, to whom we owe so much in the field of gallbladder surgery, died last summer. After all, each case must be decided by the surgeon and will test his judgment.

"Aegroti salus, suprema lex."

To put myself in a correct light before you as to my own preference I take the liberty of giving you my results and number of ectomies and cystotomies for the last year, July 1, 1916, to July 1, 1917. I cannot brag of numbers, nor is that my intention.

Total number, 55.

Cholecystotomies, 10.

Cholecystectomies, 42.

Deaths, 7.

Of the fatal cases:

1 died of pulmonary embolism.

1 died of charcot fever (cholecystectomy).

1 died of cholangitis (cholecystectomy).

1 died of cholecystitis.

1 died of cholelithiasis (cholecystotomy).

This patient had an operation for umbilical hernia and appendicitis.

2 died of sepsis due to gangrene of the gallbladder (both cholecystectomies).

Inoperable carcinoma, 2.

Adhesions destroyed, 1.

DISCUSSION OF SYMPOSIUM ON GALLBLADDER
DISEASE

DR. THOMAS B. NOBLE, Indianapolis: There is so much to be said regarding this great field that has been opened up by this symposium that I shall say very little. There are some things which we have experienced that we feel may be of service, and we shall speak of them.

We have observed that as a general thing gallstone disease as it is commonly referred to is simply an end product, it is a terminal event, it is an ultimate outgrowth of some antecedent happening or accident in the way of infection, or fault in habit of life of the individual in which the medical man can be of service and in which he may lay claim to the condition, but in which now he has no claim at all. In other words, the things that led up to the production of the gallstone disease may be medical, but when gallstone disease is once present, the medical man must step aside and turn this condition over to the surgeon, for it is absolutely a surgical matter then.

We have had discussed the matter of cholecystectomy versus cholecystotomy. Now I believe it is just as futile to array these two procedures one against the other as therapeutic measures, as ridiculous, I say, as it is to weigh an abdominal hysterectomy against a vaginal hysterectomy. They are both valuable therapeutic procedures having their own specific indication, and so we find in our therapy in regard to gallbladder disorders and biliary disorders—we find there are indications for cholecystotomy, cholecystotomy, or cholecystectomy, but we get a wrong conception, we have the wrong idea if we array one therapeutic measure against the other, and our statistics fail to prove anything. We should study the pathology, study the causation, study the pathologic sequence, but forget one therapeutic measure as arrayed against another.

I rather take issue right here while we are on this subject, with the last speaker, Dr. Martin. I have a very high regard for Dr. Martin and his

surgical skill, his measures and methods of treatment, and I do not doubt but that he reads aright, but I question his advice given a moment ago on the floor in which he makes the statement that every gallbladder demanding operative procedure should be removed if the patient's condition will admit of its removal. Now I do not believe anything of the kind. I do not believe that we have a right to remove a gallbladder just because we can remove it and because we have been called in to its presence, any more than I believe we should cut off a finger because it is sore and may require our attention. There is no question but that the gallbladder has a function, the same as the Fallopian tube has a function, and we cannot treat it as indifferently as we might treat an appendicitis. It is a different structure and it has been proven to have a function that is worth while. The gallbladder which has been wracked by the ravages of disease, the gallbladder which no longer functions, the bladder which by the processes of pathology has lost its virtues, is no longer an organ any more than a diseased uterus, a diseased pylorus. Then it should be removed. But when we have a gallbladder capable of reconstruction, capable of regeneration, capable of healing, if you please, we have no right to remove it just because it is before us and it is a pretty little operation to do.

Again relative to surgical procedure, I agree with Dr. Martin when he advises a free exposure. That is absolutely essential, and I will follow the method that I have been following for a long while, and that is a subcostal cut. This gives you a free exposure of the liver, of the right upper quadrant, in which we may treat an overlooked pathology of the kidney, stomach or biliary field. It is a beautiful field, a beautiful exposure, and I can from an experience of a few cases advise this sort of an entrance into this field. It makes the closure much more secure and it is unquestionably freer from the recurring hernias that are prone to follow a median or right rectus incision.

As to the treatment of the gallbladder itself, I believe a cholecystectomy is a better operation than a cholecystotomy because it is a quicker route to get well. Some think drainage is not necessary, that you can cut the gallbladder and tie off the stump and your patient does well, the convalescence is short, and accordingly it is much more satisfactory. Such teaching as that is wrong, for the reason that no man living can ligate or tie off the cystic duct and insure that it will so remain tied. The cystic duct differs from the Fallopian tube and from the appendix. Anybody can cut down and tie a string around an appendix and let it alone and it will heal. You can put silver wire around the Fallopian tube and it will reopen itself because the Lord intended that it should. You can tie off your

cystic duct, and you are between the operations on the Fallopian tube and the appendix—some of them will open and some will not, and if you do not drain them all when you do tie them off, it is possible that you will lose a valuable life.

DR. CHARLES STOLTZ, South Bend: There is one thing that the radical advocates of cholecystectomy fail to reckon with, and that is the fact that stones do form in the hepatic duct and also within the common duct. There are cases in which the biliary ducts are filled with stones, therefore *apparent* recurrence of stones is a fact. Now if you cut off your gallbladder and close your best avenue of drainage you will have trouble sometime if you do not watch out. There are many cases in which drainage of the gallbladder offers rest for the mucosa of the common duct as well as the biliary duct. So I think this is rather a radical statement of my friend Martin, that we should cut off the gallbladder in every instance except when we cannot do it. Of course that is a good place to stop, but a questionable limit in surgery.

I thoroughly approve of what the essayist said with reference to the way to begin to do a cholecystectomy. There are instances in which the cystic duct is so distorted that if you begin to operate there you may destroy or injure the common duct, whereas if you commence at the fundus, working down to where you can recognize and straighten out distortions, you know when you come in contact with the common duct.

Another thing, gentlemen, there is nothing particularly new in the fact that the biliary ducts and the common duct become enlarged or distended after cholecystectomy. I have observed for a long time that whenever you have a gallbladder case in which the cystic duct is occluded either by stones, adhesions or connective tissue formation, an enlargement of the conducting system is evident at operation. This has been recently proved experimentally by Judd, Mayo, Mann and others. It is therefore unwise to set up an ironclad rule for cholecystectomy, but we should individualize as in all other procedures.

Then again, there are instances in which the gallbladder might be handy to use for a cholecystenterostomy—a somewhat neglected but occasionally valuable procedure.

I approve most heartily of what has been said about the roentgen ray. Dr. Duenling very politely did not mention it. Dr. Kimberlin stated the truth about it. In gallbladder diagnosis it is detrimental clinically to have the roentgen-ray man, unless he is very conservative in his statements. If a surgeon makes the roentgen-ray diagnosis he may help you, but the roentgen-ray technician will mix you up. The latest thing I have heard of is to make a stereoscopic picture or numerous pictures and

then superimpose the plates; but this will still fail to show certain kinds of calculi and hence you get a misleading negative finding.

DR. J. RILUS EASTMAN, Indianapolis: I quite agree with the statement which has been made here that it is imprudent to attack an infected gallbladder with one's mind made up that a given, definite plan is to be followed in operating. If in case of infection of the gallbladder we had to deal with the infection of the gallbladder alone, this would be a very easy question to solve; but I have never seen a badly infected gallbladder that was not associated with infection of the ducts, and rarely does one see serious infection of the gallbladder which is not associated with infection of the pancreas and liver. So that in draining the gallbladder we drain the infected ducts, and what is perhaps more important, we drain the pancreas and liver and relieve the associated chronic pancreatitis and hepatitis. If we take out the gallbladder we remove the possibility of dealing conveniently by drainage with the chronic pancreatitis, and I believe that is an important matter. It is a better plan to remove the gallbladder only when leaving it in is dangerous. If we feel that the gallbladder can be left in and utilized for drainage without great risk, it should be left in. I may change my mind about that. Only fools and dead men never change their minds, and I do not care to be assigned to either class.

It is mischievous to yield to the temptation to take out a gallbladder simply because it is an interesting and attractive operation. I believe that as we go forward we will decide more and more to utilize the gallbladder for drainage of the ducts and for drainage of the chronic pancreatitis.

DR. HERBERT D. FAIR, Muncie: I would like to ask a question. Will an operation for the removal of stones and drainage always remove the cause of the stones?

DR. MAURICE ROSENTHAL, Fort Wayne: This discussion is not only interesting, but I think serves to bring out a few points and at the same time may serve to cover up a few points that are more or less important. Unfortunately, those cases of biliary duct or gallbladder infection which should require excision of the gallbladder are the very cases which really require drainage of the ducts. These old cases of what we might term interstitial cholecystitis are accompanied by cholangitis, and these are the cases which you should drain. It is quite possible and just as easy to drain gallducts after removing the gallbladder as to drain gallducts through the gallbladder. Passing a small tube through what is left of the stump accomplishes drainage of the bile ducts very satisfactorily, and it is just in these cases that you should secure drainage.

DR. H. O. PANTZER, Indianapolis: The discussion this morning is proof of the fact that the advances in the treatment of this disease are the advances of the newer pathology, notably, that we must regard gallbladder disease as a bacteriologic condition. It would be surprising if you were to follow your cases of exanthematous diseases, recognized as bacteriologic, how many at the early stage may develop evidence of gallbladder disease, swelling and tenderness of the appendix, etc. Indeed, you may always look for trouble in this region in people suffering from such conditions. The observations made by Kehr years ago that gallstones are secondary to infection of the gallbladder should be our guide in this matter.

I object to the use of the term "gallstone disease." It is not comprehensive enough. It only represents a very little part of gallbladder disease. Gallstones can be retained a long time, in many instances without giving rise to any trouble unless you have gallbladder infection back of it.

It is rather expressive to me of the internists' faith in medicine that it has been here advocated to give hexamethylenamin through a period of a year for the purpose of overcoming an infection of the gallbladder. We know that twenty to fifty years after an attack of typhoid fever, living typhoid germs have been found in the gallbladder. So it is quite futile to attempt by medication to get after an infection of the gallbladder.

The gallbladder, I think we must concede at this time, has both a mechanical function and also a physiologic function. The former is quite evidenced by the frequent finding of an enlarged common duct. Nature needs a mechanical device such as the gallbladder. Physiologically we have reason to assume that it has some function.

As to drainage, we should have drainage in every case, and I always drain the bladder in cases of tuberculosis of the kidney, for in many of these cases examination will reveal a very large liver. During the period of drainage at the hospital you will find the liver will resume its natural size, and months after you will find the liver will again take up its principal function.

DR. E. O. DANIELS, Marion: I just want to mention one thing that has not been spoken of, and that is that the patient with gallstones always has one symptom—pain. In postmortem findings—and that is where the most of my operations are done—you find a patient with the gallbladder packed. For instance, an old lady who died of carcinoma of the uterus, you unexpectedly find the gallbladder packed as full of stones as it would be possible for you to mechanically pack it. Of course that is extreme, but in every case where we found gallstones at

postmortem, where we were able to find people who had been acquainted with the patient for a period of years dating back to the time when they had the first attack you will find it was an attack of gastralgia or some trouble of that kind accompanied by pain, every last one of them, and I believe it is only fair to say that every one of the carriers of gallstones have at some time in their career had symptoms of pain.

Now historically I want to say that my father, as many of you know, was a physician dating back a good many years. Dr. Kemper perhaps remembers the year the Grant County Society met and we put down the discussions verbatim. In 1878 in discussing gallstones they mentioned a wonderful cure of a man at Louisville, and that was using chloroform to dissolve the stones and sweet oil to sweep them on down.

I just want to emphasize the fact that I believe no patient can have stones in his bladder without showing symptoms of pain at some time in his life.

DR. A. S. JAGER, Indianapolis: I believe cholecystectomy is an extremely serious operation, and consequently should be undertaken with due deliberation. We have listened to the lights of surgery and internal medicine of Indiana ably discuss this subject, and they have made it appear to some that it is a comparatively simple matter to isolate the gallducts, etc., and amputate the gall bladder; and perhaps it is, in the absence of acute inflammatory or chronic organized adhesions; but for the common, "garden variety" of abdominal surgeon, in which class I place myself, it will frequently be found in the presence of dense adhesions, matted and firmly welding all visible structures together, to be a more difficult operation than has been made to appear.

I do not agree with my good friend, Dr. Duemling, on the stand he takes as to nonrecurrence of gallstones after removal, because I believe they may recur, for the following reasons: A belief in nonrecurrence of gallstones presupposes a belief that gallstones are formed solely in the gallbladder (presumably due to some pathology of the gallbladder wall). This I do not think is so, for in my opinion the formation is somewhat analogous in a general way to the formation of a thrombus. Before gallstones form there must be some pathology either in the walls of the gallbladder itself, the cystic or hepatic duct, or bile channels in the liver itself; or some pathology or change from the normal chemistry of the bile itself; or some change from the normal rate of bile flow. Any one of these three major factors being present, a gallstone may form, and unless the causative factor in the formation of the stone is primarily in the gallbladder itself, I see no hindrance to formation of other stones, even after drainage

or removal of the bladder; and that this is so I believe is actually true more frequently than reported cases would indicate.

Neither do I agree with some of the preceding speakers that all inflammations of the gallbladder are infective. Rosenow states that all infections of the gallbladder reach it through the blood or lymph route, but unless I am greatly mistaken I fail to remember any statement from him that the etiology of every case of cholecystitis must be infective. If we still wish to subscribe to the old exploded theory that all inflammations are the result of bacterial activity (which I do not believe most of us agree to at this time) then there is nothing further to say. If, however, we may have inflammation that is nonbacterial in character elsewhere in the body, why not in the gallbladder? I also do not believe that in most cases infection of the gallbladder arises primarily in this organ, nor that cholecystitis is in many instances fundamentally due to infection, although I do agree that when the surgeon sees the case the bladder is usually infected; but I contend that in most such cases the infection is secondary or complicating rather than the primary cause of the inflammation. If on the other hand it is to be accepted as stated here today, that an inflammation of the gallbladder is but a localized manifestation of a systemic or general infection, then of course there is no room for further argument. It seems to me to be just as possible, and I personally firmly believe it is true, that an inflammation of the gallbladder or ducts, with or without the formation of stones, is as likely to be primarily the effect of chemical change in the bile, or changes in the structure of the affected tissues not dependent on bacterial activity, as that such inflammation is always the result of some local or general infection. I wish you to believe, however, that I agree that infection may be a common but not the sole cause of gallbladder disease.

In regard to the ligation of the stump in cholecystectomy, of course one should always ligate the blood vessels separately. I also as a matter of safety transfix the stump rather than simply tie it off, not that I believe that leakage can be prevented by this or any other method, for I do not think it can, and therefore in closing the wound drainage should always be provided; but I do believe that transfixion prevents slipping of the ligature, with consequent flooding of the peritoneal cavity with bile or infected material.

In the present light of our knowledge of gallbladder pathology I do not believe any man is justified in beginning an operation with the preconception of doing either drainage or removal, for the nature of the operative procedure should

be adjusted to the pathology found after careful ocular and digital examination; and in view of the fact that many cases do completely recover after simple drainage; that the gallbladder does perform a useful function, and that cholecystectomy is a serious operation, frequently necessitating considerable skill and delicacy on the part of even the experienced surgeon, it might be good surgery not to remove this organ except in the presence of distinct and specific indications.

DR. L. F. SCHMAUSS, Alexandria: I would like to sound a warning against the pendulum swinging too far towards cholecystectomy, for the reasons brought out in Dr. Sowder's paper, and for the reason that the mortality is larger and also that the gallbladder may be obliterated entirely by removal of the mucous membrane and by means of after treatment. I had one case showing that very nicely, in which also a cancer of the transverse colon was present. This woman died about six weeks after operation, following a perforation of her carcinoma, and the postmortem showed that the gallbladder was entirely obliterated.

Dr. Sowder mentioned the ice bag as being a bad thing. You can avoid stasis by using cold compresses instead of an ice bag.

Dr. Kimberlin, as usual, brought out some very good points, especially in regard to cardiovascular diseases and emphasized the importance of the history in gallbladder disease, which undoubtedly will help a great deal to rule out syphilis. He also mentioned that local tenderness need not necessarily be present. I recall one case in which there was absolutely no tenderness present two days before operation, but on opening the abdomen we found the gallbladder filled with pus and an abscess behind the gallbladder. So we must not look for local tenderness as an absolutely necessary symptom.

DR. A. C. KIMBERLIN, closing: I have nothing to say, but I think the surgeon's side has been well covered. I hope someone has received an incentive to go home and begin to carefully study his gallbladder cases.

DR. H. H. MARTIN, closing: Dr. Eastman in his discussion made a statement which should not be allowed to pass unchallenged.

Any one in the habit of performing operations, either on the gallbladder or elsewhere, just because said operation is easy of execution and pretty to look on, is not worthy of membership in this or any other reputable medical organization.

If our work, whether surgical or medical, is not to be founded on scientific knowledge based on scientific investigations, then we are not worthy of such membership.

In reply to Dr. Noble, who makes a plea for

cholecystotomy rather than cholecystectomy, I wish to state that science and experience demonstrate that we cannot drain living micro-organisms from the walls of a diseased gallbladder and expect to cure over 50 per cent. of our cases. If Dr. Noble is satisfied with this per cent., well and good.

A fact which has not been brought out in the discussion is that these living micro-organisms harbored in retained diseased gallbladders may and usually do, through the blood stream, metastatically infect some other organ or tissues, the heart, kidneys or joints.

I believe that it is now time to discard the old theory that the gallbladder must always be retained, for fear that at some future time it may become necessary to drain the ducts. If it is necessary this can be much more efficiently accomplished by direct rather than by draining through the gallbladder.

DR. H. A. DUEMLING, closing: In the first place I did not mention roentgen ray as a diagnostic factor for the reason that I do not depend on this for operation. Whenever my roentgenologist makes a plate showing gallstones, if I operate and find stones, he stays during the operation; if I do not, he immediately disappears.

I made the statement that stones do not recur. I see that I have run athwart some difference of opinion on this point. I say again that stones do not truly recur. I mean by that that if the entire gallbladder is freed from stones and the condition that is responsible for the formation of stones is removed, then the stones do not recur.

A statement was made in regard to the mortality in the Mayo Clinic. I believe that mortality covers a certain class of cases and is not truly the mortality of all cases seen or operated on. How could it be possible that in the general run of cases as they come to the ordinary "garden variety" of surgeon, as has been mentioned, you would get say a mortality of 1.7 per cent. I believe the mistake is ours wholly, that we do not appreciate that this mortality covers but a certain class of cases.

DR. H. H. MARTIN: It is cholecystectomies, 1.73 per cent; cholecystotomies, 14 per cent. That means that they are doing principally the cholecystectomy and that they are very hesitant to do a cholecystotomy.

DR. DUEMLING: As to the relation of the cystic duct to the common duct, the point has been brought out here of the possible danger of removal of the gallbladder from the cystic duct up toward the fundus. The cystic duct occasionally lies nearly over to the common duct. I had one the other day. The cystic duct came nearly under the common duct. I am glad that Dr. Stoltz endorses the removal from the fundus down.

As to drainage, it is absolutely necessary to have drainage. If you do not you may get away with it at the time, but the time is coming when the case will die just because you did not put in a drain. I agree with Dr. Martin. I do not see why you should want to leave a diseased gallbladder in without a drainage tube and drain the common duct, when you can split the common duct and put in a T drain.

The Standard Publishing Company, of Cincinnati, publishers of such religious papers as the *Christian Standard*, *Lookout*, *Standard Sunday School Series*, etc., carries a lot of questionable medical advertising, and when their attention was called to the fact they fell back on the argument that they feel justified in carrying the advertising when medical publications like the *Medical Standard* also carries the same advertising. There are many dishonest people and many fakes wrapped with the cloak of religion, thereby securing a certain air of respectability and prosperity not deserved. If the managers of the Standard Publishing Company and the editors of the various religious publications they print were really sincere in their desire to do the right thing they would avoid even seeming wrongdoing and practices which are questioned by many reputable people. No first class newspaper or magazine would take the *Police Gazette* as a criterion, and no reputable medical journals would accept the *Medical Standard* as a criterion. The essence of the whole proposition rests with the question of how elastic a man's conscience can be in order to do reprehensible things for profit. Of all the lay publications that should be clean in every particular the religious periodicals should take the lead, and yet it is a well recognized fact that many of them are the most open to just criticism. The probable reason for this is found in the well-known fact that most religious periodicals are poorly supported, and in order to avoid a deficit and keep up an appearance their managers are willing to wink the other eye when the advertising solicitor brings in contracts that would not be accepted by many lay publications making less pretentious religious claims. Two things are necessary to correct this condition of affairs: First, the readers of religious papers should insist that the advertising department of all religious papers shall be free of advertising that can be questioned by anyone; and secondly, the religious people should give better support to religious papers in order that there may be no temptation to improve the credit side of the ledger by the acceptance of objectionable advertising.

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EDITORIALS

SIGNIFICANCE OF THE WIDAL REACTION

Every practitioner who has to deal with typhoid fever ought to have a clear-cut idea as to what the Widal test is, how it is made, and what it means. He who takes the trouble to learn these points and thereby get the correct idea will save himself the embarrassment of a wrong diagnosis now and then.

It is very well known that the Widal test is positive in nearly 100 per cent. of the cases. In other words, in nearly every case the serum of the patient, diluted 100 times, will act on the specific bacillus—*Bacillus typhosus*—in such a way as to cause agglutination and loss of motility. This is dependent on the formation in the blood of specific antibodies, the exact nature of which is scarcely known at all. These antibodies are formed under the stimulus of the specific antigen or etiologic agent, the *Bacillus typhosus*. Theoretically, these antibodies always should be elaborated when the specific antigen is at work, and never should be formed in conditions in which the specific antigen is not at work. In practice, however, it is found that this does not hold true in every instance. Occasionally cases that seem beyond doubt to be cases of infection with the *Bacillus typhosus* do not exhibit a positive Widal test; and, on the other hand, very rarely it occurs that cases other than typhoid fever develop a positive Widal test. Such paradoxical results are difficult to reconcile with our accepted ideas on infection and immunity. Fortunately they are the exception; indeed, they are quite uncommon. Yet it is the occurrence of just these instances that prevents us from accepting the Widal reaction as an absolutely reliable test for the diagnosis of typhoidal infection. It is a very helpful test, indeed, and a fairly reliable one, as reliable as

any serologic test can be. But all serologic tests have their limitations, so that in order to be able to interpret intelligently the significance of any serum test the physician must know the salient points concerning that test, its limitations and the possibility of error that goes with practically all serologic reactions. Only by having such knowledge can the physician properly appreciate the significance of the Widal test or any other serologic reaction.

OPPONENTS TO ADVANCES IN MEDICAL SCIENCE

Physicians as a class are never more misunderstood nor unjustly criticized than when they oppose the activities of that group of individuals who from one point of view or another have set themselves in opposition to medical science. This group of individuals who are opposed to medical science is rather large in number, has nothing except hatred and opposition for the medical profession, and forms a sinister menace in every community where the group is large enough to make its influence felt. Considering that no physician can get an unprejudiced hearing for the expression of the warning concerning this menace, it is, therefore, a matter of extreme importance and great satisfaction when this menace is proclaimed to the public from an absolutely unbiased and impartial source, and testimony is offered which cannot be impeached on the old score of professional selfishness. Just such an unbiased statement of the real danger of this menace to the community recently has been published in Indianapolis, and it ought to have the widest publicity, for the opportunity does not present often to reach the thinking as well as unthinking public with statements of facts of such vital importance.

In a campaign for civic improvement, instituted and financed by the Chamber of Commerce of Indianapolis, a number of the very best municipal research experts were employed to make an exhaustive survey of every department of the Indianapolis city government. These experts were given an absolutely free hand to go into every department of the city government, pick out the weak spots in organization and administration, and present their findings in a report covering every detail. Ap-

parently the city administration cooperated in the heartiest manner with the effort to give the experts free access to the books and minutes of all the departments. The reports of the experts are being given to the public through the press, and every one who reads them is impressed by the immense amount of work done and the intelligence of the recommendations. It is conceded by all that the reports are a contribution of great value to the effort of civic progress.

In the exhaustive report concerning the work of the department of health, reference is made to the efforts of the city board of health to check an epidemic of typhoid fever. In accordance with the universally accepted judgment, so the report says, that vaccination is one of the most efficient methods of preventing typhoid, the board issued an order for the vaccination of all schoolchildren, refusal to comply with the order preventing their attendance at school. This antityphoid campaign had not been in force a great while until opposition developed and made itself felt. The experts here identify the menace in this manner: "A group of ignorant individuals with political influence forced the rescinding of the vaccination order before the fullest benefits to the community were realized." We may well ask who constituted this "group of ignorant individuals," identified by the experts as blocking the legitimate and intelligent efforts of the board of health to guard the lives of citizens against the ravages of typhoid? It is a matter of official record of the courts of Indianapolis that one Fitzpatrick filed an injunction suit against the board of health to prevent the enforcement of the order. Fitzpatrick is an attorney, and it is a matter of common knowledge that in this suit his clients were recruited from the ranks of the Christian Scientists and other medical pretenders and pseudomedical cults. The Indianapolis public has to do only a little bit of thinking and investigating to learn who in the opinion of the research experts constitute the "group of ignorant individuals" that form a sinister menace to the health of the community.

We presume that the expert who wrote the report in question, knowing as he did just what influences were behind the opposition, had some difficulty in choosing the right adjective to qualify the most prominent characteristic of this "group of individuals." Physicians prob-

ably would think the term "ignorant" too charitable, but it is an appropriate use of a word, for it is ignorance, even though it be culpable, inexcusable ignorance, but ignorance nevertheless. Ignorance of the fundamental, basic things of life—of chemistry, physiology and biology. If the leaders of these organizations that are so pugnaciously opposed to medical science were not fundamentally ignorant the organizations which they represent soon would cease to exist.

In its broader sense this opposition to medical science during these troublous times becomes a question of patriotism. Would any one of this "group of ignorant individuals" consent to have the lives and health of the armies of the nation guarded by the practice of their teaching? But a few weeks of administration at the hands of the opponents of medical science would result in the utter demoralization and speedy defeat of our Army and Navy. In this connection it occurs to us that the astute German propagandists have overlooked at least one good chance to serve the kaiser, for if early in the history of this war they had persuaded Uncle Sam to discharge General Gorgas and employ in his stead some leading Christian Science practitioner, with a liberal sprinkling of osteopathic and chiropractic majors to assist in looking after the health of our soldiers, at one stroke they would have nullified every ounce of energy represented by the men and money which the United States will contribute to victory. Intelligent and well-meaning men ought to know that when they patronize osteopaths and chiropractors or align themselves with the Christian Science organization, their money will be used to defeat measures designed to protect the lives and health of the nation.

One outstanding feature of this war is that medical science will receive its supreme justification. Recently we heard a French army officer, who had seen seventeen months' service in the trenches, while addressing a large audience of laymen, admonish his hearers to salute the physician ever after this war for what his priceless services have meant to the soldier. And this story will be repeated as the wounded and disabled soldiers come trickling back from the front, for they will carry everywhere the story of the part played by medical science in saving lives and relieving the horrors of war.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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PAY your dues now! Remember that the amount is \$4 instead of \$2 as heretofore. There is no excuse for delay.

SECRETARIES of county medical societies are reminded that dues for the Association are to be sent to Mr. Frederick E. Schortemeier, executive secretary of the Indiana State Medical Association, 314 Hume-Mansur Building, Indianapolis.

SEVERAL county medical societies in Indiana have arranged to pay both the county and state medical association due for any of their members who are in active military service. This is a commendable action, and we hope that it will be adopted universally throughout the state.

DESPITE the seriousness of the times, let us wish our readers a "Merry Christmas and a Happy New Year," but at the same time let us voice a prayer for the safety of our soldier boys and for an early realization of "Peace on earth, good will toward men," which will reign for all time to come.

THE Chamberlain Bill, covering universal military training, which is to come up for consideration at the coming session of Congress, should receive the attention and support of all physicians. At this critical time in our nation's history, thinking people are conceding that if we ever are to adopt universal military training as the policy of this country, this is the time to do so. Aside from the efficient national defense this would offer, the decided physical improvement it would mean to the young men of the nation is a matter that deserves more than the passing attention of medical men; and on physicians, as experts, rests a responsibility to urge the passage of the Chamberlain Bill.

BECAUSE of the fact that Dr. Charles N. Combs, Secretary of the Indiana State Medical Association, is in military service, all membership dues are to be sent to the Executive Secretary, Frederick E. Schortemeier, 314 Hume-Mansur Building, Indianapolis. In this connection we might add that membership dues are payable NOW.

THE eye, ear, nose and throat specialists of Indiana who are identified with the Indiana State Medical Association are invited to attend a mid-winter meeting to be held at Indianapolis in February, the exact date to be announced later. This is a move in the right direction, and will mean much for the advancement of scientific work among the specialists, to say nothing of encouraging professional good fellowship.

IN an article in the *Saturday Evening Post* of November 17 we note the following:

"A slicker is a slacker in a uniform—one of those fellows who kid themselves into thinking that they're heroes the moment they get on a uniform. It's a great word. It means getting credit for being a patriot when you are nothing but a slacker."

From some very suspicious circumstances and actions we are inclined to believe that there are some slickers in the medical profession. Here's hoping that some of them will get fooled before the war is over and be compelled—unwillingly perhaps—to be real patriots.

THE accounts of the funerals of the three American soldiers killed a few days ago in a trench fight refer to them as "the first Americans to die in the war to make the world safe for democracy." While in nowise attempting to detract from the glory of these brave boys, it seems unjust to accord them a glory which really belongs to others. As the *News* sees it, those valiant young doctors who were killed two weeks ago while working back of the firing line are the real first victims of our struggle. To be sure, they were attending to the wounded of England, but they were attached to the American medical service as officers and they met death as bravely and in the same cause as the trench fighters. They surrendered their lives for their country and met their fate without flinching. No man could do more, and if there are laurels to be given for the first who fell let them be twined with the myrtle on the graves of these gallant young doctors who gave the last full measures of devotion.—*Fort Wayne News*, November 13.

AMONG the activities of the National Association for the Study and Prevention of Tuberculosis along educational lines is the publication of the *American Review of Tuberculosis*, which, in the nine months of its existence, has become a valuable periodical in medical circles throughout the United States. The publication has an editorial staff composed of men of national as well as international prominence and authority on the subject dealt with. Sample copy or other information regarding the *Review* may be obtained from the National Association for the Study and Prevention of Tuberculosis, 105 East Twenty-Second Street, New York City.

SMALLPOX is epidemic in a number of localities in Indiana, and, in some cities, has been quite alarming. The disease is mild in form, but nevertheless is the real article. The amusing feature in connection with the subject is that the chiropractors, osteopaths, Christian Scientists, and all the other pseudomedical cults are steering clear of the disease, and cannot be bribed nor forced to see a case. Incidentally, some of the Christian Science adherents temporarily have so little faith in the beliefs they proclaim so loudly when they are well that they are even voluntarily seeking vaccination, and others are falling so far from grace that they really have smallpox. And yet there are those who think there is nothing contradictory in this evidence!

THE leaders in the Russian revolution are some undesirables who were refused admission to France and England, but were tolerated in America. Isn't it about time for this country to follow in the footsteps of other enlightened countries by refusing to furnish a home for a lot of undesirables who always have been and always will be against organized government? Also, isn't it about time for this country to back a few traitors up against a wall and fill them full of lead? We have altogether too many persons in this country who are aiding Germany, either openly or secretly, and such persons, as enemies of our country, deserve shooting or hanging.

WE have every reason to believe that a bill will be introduced at this session of Congress making it obligatory for every physician in active practice to offer his services to the government. Probably all medical men under 35 years of age, whether married or not, will be required to enlist for military service before another six months passes, and all medical men between the ages of 35 and 60 will be required

to join the Medical Reserve with the prospect of seeing service of one kind or another in their homes. Undoubtedly no objection will be raised to this plan, but even if objection is raised it will not count for much when the country is at war and needs enough medical men to care for an army of from two to five million men.

Two days after the membership blanks were mailed to the various county secretaries and before the ink was hardly dry on the circular letter outlining the One Hundred Per Cent. Club contest, a check for \$100, the full paid-up membership of the county society's twenty-five members, was in the office of the Executive Secretary. "Don't forget to call on Tipton County at any and all times," said the letter from Secretary A. E. Burkhardt, accompanying the check. Loyal cooperation of this sort makes the work of the Executive Secretary's office a real pleasure, and it is hoped that other county societies will follow the worthy example Tipton has set. There is nothing so discouraging as the necessity for sending out follow-up letters requesting action on some matter of importance to the state society.

COUNTY medical society secretaries are reminded that we have a department devoted to Society Proceedings, and we hope to have reports of all meetings at which a good scientific program is carried out. Occasionally we hear a doctor say that his county medical society secretary has made the claim that he sent in society proceedings and they have not been published. Chalk up all such reports as falsehoods. No report of scientific proceedings of any county medical society in Indiana ever has come in to THE JOURNAL office and not been published, at least in abstract form, and almost invariably in full. The trouble with most secretaries is they either are too busy or too lazy to get up reports for publication, and oftentimes we feel that we can hardly blame them, for the average secretary gets little credit for his work.

THE office of Executive Secretary has undertaken to establish a central bureau for the exchange of physicians to read professional papers before the various county medical societies. Many members believe that one way to increase interest in the county society meetings is to have available a list of visiting doctors to address them on various subjects of interest to the profession. The plan has the hearty indorsement of Dr. Joseph Rilus Eastman, President of the State Association, and of the Committee on Administration. There are a number of men

well qualified for this work, and it is felt that practically every local society will enjoy a visit from other doctors a few times each year. Each society which approves the plan is asked to provide the Executive Secretary with a list of dates preferred between now and June 1 and also the names of the men preferred as speakers. The society also is asked to send in the names of those doctors who will be willing to go before other societies to read papers they have prepared or which they may prepare. It is understood that the society inviting a physician to speak will pay his expenses.

WE earnestly urge every county medical society in Indiana to pay the county and state medical association dues of any of its members who may be in military service. It is not sufficient to give them honorary membership during the period of military service, for that means that the county and state medical organizations do not receive the funds that are sorely needed for keeping up enterprises that are just as much for the benefit of members in military service as for those who are at home. Furthermore, there is no good and sufficient reason why those doctors who remain at home should not be willing to pay a little extra for the benefit of their confrères who have at great sacrifice, financially and otherwise, given their services to their country. Let the badge of shame and disgrace be tacked on to any doctor who refuses to help pay the county and state association dues of any of his confrères who are in military service. Let us have a full enrollment in the state association, with dues fully paid for all members, and those who stay at home should consider it an honor and privilege to pay for those who are away in the service of the country.

DEATHS

JOB D. FITZPATRICK, M.D., aged 88, died November 9, at his home in Dunkirk.

CYRUS J. BULHAND, M.D., died October 26, at his home at Hobart, aged 68 years.

WILLIAM H. WEBB, M.D., aged 91 years, died November 8, at the home of his son at Adams.

ANNA C. TUCKER, widow of the late Dr. Albert R. Tucker of Noblesville, died October 27, aged 67 years.

H. W. FARMER, M.D., aged 30 years, formerly of Laud, died November 24 at the home of his sister at Mooresville.

NANCY BARD, widow of the late Dr. J. C. Bard, died November 20, at her home in Crothersville, aged 65 years.

THOMAS S. MOTTER, M.D., 80 years old; for fifty years a physician of Tippecanoe County, died at his home in November.

SARAH KATHERINE MUNSEY, widow of the late Dr. D. O. Munsey, died November 13, at her home in Gaston, aged 61 years.

WILLIAM O. BENSON, M.D., Milford, died November 11, from pneumonia, aged 45 years. Dr. Benson graduated from the Hering Medical College, 1900.

HARRISON GABEL, M.D., aged 76 years, died November 15, at his home in Centerville. Dr. Gabel graduated from the Central College of Physicians and Surgeons of Indianapolis in 1880.

WILLIAM H. H. ASBURY, M.D., retired physician of Clay City, died November 11, at the Post-Graduate Hospital at Chicago, where he had undergone an operation. He was 77 years of age. Graduated from the Ohio College of Medicine, Cincinnati, 1875.

WILLIAM T. GRIFFIS, M.D., died at his home at Fountain City, November 20, after an illness of several months, aged 70 years. Dr. Griffis graduated from the Eclectic Medical College, Cincinnati, in 1871. He was a member of the Wayne County Medical Society and the Indiana State Medical Association.

WILLIAM S. POLLARD, M.D., Evansville, died November 1, at St. Mary's Hospital, following an operation for gallstones, aged 79 years. Dr. Pollard was a veteran of the Civil War, and gained his medical education at the Miami Medical College after the war. He located at Evansville in 1871. He leaves one son, Dr. Walter S. Pollard, of Evansville.

GEORGE MURPHY, M.D., died November 3, at his home in Fort Wayne, aged 69 years. Dr. Murphy graduated in medicine from the University of Wooster, Medical Department, in 1870. practiced medicine at Leo and Spencer-ville for more than thirty years, held commission as captain in the Civil War, and lectured for a number of years at the Fort Wayne Medical College on the subject of chemistry and toxicology.

FIELDING L. DAVIS, M.D., Evansville, died November 1, aged 86 years. Dr. Davis was born in Warrick County, Ind., in 1832; graduated from the Cleveland University of Medicine and Surgery in 1870, and has practiced medicine in Evansville the greater portion of time since then. He was a member of the Ohio Valley Medical Society, the Indiana Homeopathic Medical Society, the Vanderburg County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN C. WEBSTER, M.D., Lafayette, died November 10, aged 76 years. Dr. Webster graduated from the Rush Medical College in 1870, served on the state board of medical registration and examination for years, and held membership in the Tippecanoe County Medical Society, the Indiana State Medical Association and the American Medical Association. He also was a veteran of the Civil War. Dr. Webster was held in high esteem by citizens and members of the medical profession. The Tippecanoe County Medical Society passed resolutions on his death, and attended the funeral in a body, thus attesting to the love and honor in which Dr. Webster was held.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

INDIANAPOLIS

DR. HENRY JAMESON has been appointed fuel administrator for Marion County.

DR. FRANK E. WYNN, Indianapolis, has been appointed chairman of the state society's Committee on Administration.

DR. FRANK E. ABBETT has moved to 608 Hume-Mansur Building. He is now associated with Drs. Jameson, Layman, Neu and Rogers.

DR. C. J. MCINTYRE returned November 18 from a three months' stay at the Montgomery, Ala., training camp, where he was acting as contract surgeon.

MAJOR FRED TUCKER, Noblesville, formerly chief sanitary officer at Fort Benjamin Harrison, has been transferred to Fort Oglethorpe, Ga., for the winter.

FREDERICK E. SCHORTEMEIER, Executive Secretary, paid visits to Terre Haute, Greenfield and Richmond last month, addressing members of the county societies at the regular meetings.

DR. W. H. FOREMAN, Indianapolis, read a paper at the meeting of the Johnson County Medical Society, at Franklin, November 14, on "Chronic Constipation," while Dr. W. E. Pennington showed some lantern slides.

DR. F. F. HUTCHINS, Indianapolis, won another promotion last month and has now been commissioned a major in the Medical Officers Reserve Corps, and has been detailed to Fort Oglethorpe, Ga., where he will become an instructor.

DR. FRANK B. WYNN, Indianapolis, was chairman of the program committee for the annual meeting of the Indiana Society of Pioneers, which was held at the Claypool Hotel, December 11, the date of the state's admission to the Union.

THE Indianapolis Medical Society, at a recent meeting, voted to pay the dues of all members in the military service. As more than sixty already have entered the Medical Corps, this means a patriotic obligation of more than \$240 a year by members of the society.

DR. FRANK B. WYNN and Drs. Charles S. Woods, superintendent of the Methodist Hospital at Indianapolis, attended a meeting at Princeton, Ind., last month, held in the basement of the new hospital recently taken over by the Methodists. About 100 doctors attended the meeting, including a number from Illinois.

WORD has been received of the promotion from captain to major of Dr. Carleton B. McCulloch of Indianapolis, who is a member of the Medical Reserve Corps. Dr. McCulloch has held a commission in the Medical Reserve for several years, his certificate having been signed by former President Taft, and he was one of the first to offer his services after the United States entered the war.

MAJOR EDMUND D. CLARK and Capt. Charles D. Humes of Base Hospital No. 32, have returned to Fort Harrison after a course of special training in military surgery at Philadelphia. Major O. G. Pfaff, who was in command of the units during the absence of Major Clark, has been discharged from the service because of a

badly injured knee. He was a patient at St. Vincent's Hospital for a number of weeks, and although he is now able to be about, his injury was of such nature that it would be impossible for him to accompany the unit to France.

DR. VIRGIL MOON, Indianapolis, was elected third vice president of the Ohio Valley Medical Association at its annual meeting at Evansville last month. Dr. William Shimer, Indianapolis, was retiring president, being succeeded by Dr. J. Rawson Pennington, Chicago. One of the features of the convention was a free tuberculosis clinic conducted by Dr. Silvo VonRuck, tuberculosis specialist at Asheville, N. C. In an address Dr. VonRuck said that tuberculosis can be eliminated by vaccination. He pointed out that 70 per cent. of those afflicted with tuberculosis contract the disease during childhood, and that 14 per cent. of the population of the United States died of the disease.

WORD has been received from France that Dr. Arthur E. Guedel, Indianapolis, has been transferred from Base Hospital No. 15, near the fighting front, to a hospital in Paris, which was established by a wealthy Parisian woman for the care of wounded American soldiers. The transfer comes as a promotion, as Dr. Guedel will be a senior lieutenant, acting as adjutant to Captain Mantan. Before his transfer he was stationed less than 3 miles from the camp of the American troops who have taken over a part of the French line. He has been impressed with the bravery and politeness of the French. There is never a murmur, he says, and the Frenchman's thought is always for the other fellow.

CAPT. PAUL F. MARTIN of Indianapolis, attached to Lilly Base Hospital unit, was married Saturday, December 1, to Mrs. Grace Ellsworth DeWitt, also of Indianapolis. A leisurely ceremony had been planned with all the usual nuptial festivities, but sudden army orders upset all these arrangements. The ceremony was performed at 2:47 o'clock and the captain was due at Fort Harrison at 3 o'clock. Jumping into an automobile, he broke all speed laws in reaching the post. Mrs. Martin will join her husband later. Captain Martin served some time in 1916 and 1917 as a surgeon in an Austrian base hospital at Parubitz, Bohemia. He left Indianapolis in June, 1916, but returned in the spring when it became apparent that relations between the United States and the central powers would be seriously strained.

GENERAL

DR. MORSE HARROD, Fort Wayne, has been a victim of the smallpox epidemic.

DR. E. R. WALLACE, Aurora, has gone to Chicago for six weeks' postgraduate work.

DR. T. B. GULLEFER and Mrs. Inez Barnes of Greensburg were married November 16.

DR. O. P. GRAHAM has been elected medical inspector for the Jeffersonville public schools.

DR. J. K. HAWES, Columbus, will be in Chicago until the first of the year doing special work.

LIEUT. WEIR MILEY, Anderson, has sailed for "somewhere in France" with the laboratory group.

DR. S. M. VORIS, Columbus, since his return from Duluth, Minn., has moved his office to his residence.

DR. O. H. SWANTUSCH, formerly of Metz, has located at Angola for the practice of medicine.

DR. THOMAS B. EASTMAN, Indianapolis, recently has been elected councilor for the Seventh District.

DR. W. M. HALL, Pennville, has removed to Portland where he will engage in the practice of his profession.

CAPT. T. M. JONES, Anderson, has been ordered to report at New York City for a course in brain surgery.

DR. DAVID L. LUTES, formerly of Victoria, Mich., has located at Laud, taking over the practice of Dr. B. F. Stickler.

DR. F. L. SILARRER has closed his hospital at Francesville and located at Benton Harbor, Mich., for the practice of surgery.

DR. CHARLES SEITZ, Evansville, was married November 18 to Miss Arnia Lloyd, trained nurse at the Walker Hospital, Evansville.

CAPT. L. F. MOBLEY, Summitville, is stationed at Fort Oglethorpe, Ga. In his company are doctors from thirteen different states.

DR. C. E. STONE of Shoals, first lieutenant in the M. O. R. C., has been assigned to the army hospital at Fort Sherman, Chillicothe, Ohio.

MELVIN S. TETERS, M.D., son of Dr. B. F. Teters, Middlebury, will engage in the practice of medicine with his father at Middlebury.

DR. ROSE ALEXANDER BOWERS of Michigan City has been appointed temporary member of the staff at the Mayo Clinic, Rochester, Minn.

DR. GRIFFITH, formerly of Francisco, has located at Spurgeon for the practice of medicine, taking over the practice of Dr. J. S. Baker.

DR. WALDO FARNHAM, Fort Wayne, has been promoted to the rank of captain, and probably now is on his way to "somewhere in France."

BARTHOLOMEW COUNTY has three medical men in training, Drs. A. P. Roope, Columbus; L. H. Redman, Elizabethtown, and Dr. Thorn.

DR. B. J. PETERS, Kokomo, is located at Austin, Texas, in charge of the Aviation Hospital. He expects to be stationed there until spring.

THE county council of Madison County has purchased fifty-two acres of ground as a site for the new Madison County Tuberculosis Hospital.

DR. O. P. M. FORD, Rising Sun, who has been confined to a hospital in Cincinnati, has returned to his home and is making an uneventful recovery.

DR. J. H. NILES, Seymour, has received his commission as first lieutenant in the U. S. Medical Service, but as yet has not been ordered for duty.

DR. W. W. HARRIS, Bloomington, who has been stationed at Ft. Oglethorpe, Ga., has been promoted to captain in the Medical Reserve Corps.

DR. F. G. DYAS, Chicago, spoke before the Huntington County Medical Society at its regular meeting on November 7 on the subject, "Local Anesthesia."

DR. F. F. HUTCHINS, Indianapolis, has been commissioned as major in the Medical Officers Reserve Corps and stationed at Fort Oglethorpe, Ga., as instructor.

DR. J. W. BENHAM, Columbus, was called to Vincennes last month on account of the sickness and death of his brother, Dr. Charles W. Benham, who died October 3.

It is reported that Maj. Orange G. Pfaff, Indianapolis, member of Base Hospital Unit No. 32, will not be able to accompany the unit because of an injury to his knee.

DR. FRANCIS LE ROY SATTERLEE, noted for his research work in the treatment of gout and rheumatism, died November 12 at his home in New York City after a brief illness.

DR. J. P. HETHERINGTON, Logansport, made an address before the convention of the Railway Surgeons Association of the Pennsylvania Lines held recently at Washington, D. C.

DR. CHAS. C. CRAMPTON of Delphi, first lieutenant in the Medical Officers Reserve Corps, has been transferred from Fort Benjamin Harrison to Fort Devan, Ayres, Mass.

DR. H. F. MITCHELL of South Bend has been commissioned by the War Department to inspect southern camps and examine soldiers who seek discharge because of tuberculosis.

DR. E. D. JEWETT, St. Paul, who has been in military training for several months and stationed at Fairfield, Ohio, has received an honorable discharge and returned to his practice.

LIEUT. WILL MOORE, Summitville, who has spent a year in service in war hospital in Vienna, Austria, was ordered to report for duty at American Lake, Wash., on December 1.

DR. H. M. HOSMER, Gary, has been promoted to the rank of major in the Medical Officers Reserve Corps. He is now located at the new cantonment of the national army at Chillicothe, Ohio.

DR. JOSEPH RILUS EASTMAN, President of the Indiana State Medical Association, of Indianapolis, has been appointed medical adviser to Indiana's Governor in connection with selective service law.

DR. HOLMAN TAYLOR, editor of the *Texas State Journal of Medicine*, is now Lieutenant-Colonel Taylor of the One Hundred and Forty-third Infantry, and is located at Camp Bowie, Fort Worth, Texas.

DR. GEORGE LEONARD, Kendallville, recently returned from a hunting trip in the Maine woods, entertained the members of the Kendallville Medical Society at a venison dinner at 6 o'clock on November 12.

THE September report of the State Board of Health shows that typhoid fever continued to be the most prevalent disease in Indiana during that month. There were 561 cases in 74 counties, with 93 deaths.

DR. GEORGE R. DANIELS, Marion, and Dr. L. P. Drayer, Fort Wayne, were guests at the joint meeting of the medical societies of Jay, Wells, Blackford and Grant counties, and delivered addresses before the session.

DR. W. H. JACKSON, for twenty years a practicing physician at Hicksville, Ohio, has accepted a position as resident physician at the State Epileptic Farm Colony at Wahjamiga, Mich., and has removed to that place.

DR. JOHN J. KYLE, formerly a practicing physician of Indianapolis, but now of Los Angeles, Calif., has been commissioned major in the M. O. R. C. and is stationed at Camp Lewis, American Lake, Washington.

DR. A. S. NEWELL, Converse, has been promoted to the rank of captain in the Medical Officers Reserve Corps, and is stationed with the One Hundred and Sixtieth Depot Brigade at Camp Custer, Battle Creek, Mich.

ON November 15 seventy-six medical officers left Fort Benjamin Harrison for a port of embarkation for France. Moving orders were received late in the morning of the 15th, and by 2 o'clock the doctors were on their way.

DR. T. W. KELSEY, formerly of Attica, has completed his work in the Bellevue Hospital Eye and Ear Infirmary, New York, and has joined his family in Los Angeles, Calif. He has not chosen a permanent location as yet.

Two complete hospital trains have been organized at Fort Benjamin Harrison. Each train has six lieutenant physicians and thirty men picked from the enlisted personnel of the medical corps. The trains are completely equipped with operating rooms, sleeping cars for the men and officers, cook cars and hospital ward cars in which the wounded will be carried.

THE Cuban Red Cross Society is equipping a 100-bed hospital unit, manned by Cuban physicians and nurses, for service on the western front of France. Cuban women have set out to raise a fund of \$1,000,000 to finance the unit.

DR. C. C. PHILLIPS, Owensboro, who has been in training at Fort Benjamin Harrison, has been assigned to a post at Panama where he probably will be stationed throughout the duration of the war. His family accompanied him.

THE U. S. Supreme Court has declined to disturb the decision of the Ohio Court which found Dr. Charles M. Simpson, Cleveland, guilty of misbranding medicine manufactured by him. Simpson was fined \$200 by the lower court.

DETAILED report of health conditions at National Guard and National Army cantonments, issued by Surgeon-General Gorgas, shows less sickness in cantonments composed of troops from northern states than among the men from the South.

DR. GEORGE WARNE, formerly of Newcastle, has located at Tipton and will be associated with Dr. M. V. B. Newcomer in the practice of medicine. Dr. Warne takes the place made vacant by Dr. Hanson Gifford, who has entered military service.

THE annual meeting of Sullivan county physicians and dentists was held at Hotel Davis, Sullivan, on November 7, in the form of a banquet. No regular program was carried out, but consisted of a general conference covering war problems of all kinds.

DR. CLARK J. STEVENS, Rockville, was married on October 15th to Miss Roxie Parker. The ceremony took place at Chicago. Dr. Stevens has held the position of superintendent of the Indiana State Tuberculosis Hospital at Rockville for the past three years.

DR. EDWARD J. McOSCAR, Fort Wayne, who presented a paper on "Intestinal and Mesenteric Rupture from External Violence" before the third joint meeting of Railway Surgeons' Association of the Pennsylvania Lines, held at Hotel Raleigh, Washington, D. C., October 29 to 31, was awarded first prize for the best paper read before the association at this meeting. The prize consisted of a McIntosh electric diagnostic outfit.

DR. H. G. DAVIS, Union City, has taken a partner to be associated with him in the practice of medicine, a Dr. Shaffer from Chicago. Dr. Shaffer is a graduate of Northwestern University School of Medicine, and has been connected with the hospital of the Inland Steel Company.

DR. A. P. ROOPE, Columbus, a captain in the Medical Reserve Corps, was ordered from Fort Benjamin Harrison to Philadelphia where he took a course in plastic surgery of the face at the University of Pennsylvania. It is understood that he will be assigned to an evacuation hospital.

It is announced by the chairman of the council of the Michigan State Medical Society, Dr. Reuben Peterson, that 621 physicians living in Michigan have joined the Medical Department of the Army and are now engaged in active service. This is twenty-one more than Michigan's quota.

DR. R. D. WILLAN and Dr. Ira Willan, Trafalgar have dissolved partnership. Dr. Ira Willan has returned to Morgantown where he will resume the practice of medicine, and Dr. Carl Willan, who has been in ill health for several years, has regained sufficiently to take up the work in his father's office at Trafalgar.

DURING November the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Farbwerke-Hoechst Co., New York: Salvarsan.

Borcherdt Malt Extract Co.: Borchardt's Malt Sugar.

NEW officers for the Thirteenth Councilor District Medical Society for 1918 are as follows: President, Dr. J. C. Fleming, Elkhart; vice-president, Dr. S. C. Loring, Plymouth; secretary-treasurer, Dr. C. N. Howard, Warsaw; councilor for three years, Dr. H. M. Miller, South Bend. The spring meeting will be held at South Bend.

LUTHERAN HOSPITAL, Fort Wayne, is erecting a new \$10,000 addition to its nurses' home in order to comply with the request of the Allen County Council of Defense that more nurses be added to their training staff. The hospital now has a class of sixty-nine nurses, and with the completion of the new addition they expect to take on twenty-five more pupils.

It is announced that America's first reconstruction hospital will be built in Boston by the Order of Elks through the Elks' War Relief Commission. The institution will cost \$250,000, and will consist of a complete unit of twin ward hospital buildings, vocational work shops, barracks, mess hall and post exchange, and is to be a standard for similar hospitals.

THE Aesculapian Society of Wabash Valley held its seventy-first annual meeting at Paris, Ill., November 2. Instead of holding the annual banquet, \$75 was voted to the work of the Red Cross. Officers for the coming year are: President, T. O. Freedman, Mattoon, Ill.; vice-president, Charles N. Combs, Terre Haute; secretary, H. N. Rafferty, Robinson, Ill.

AFTER more than two years of litigation the case of the government against the Miles Medical Company of Elkhart, in which the misbranding of drugs was charged, was brought to a close on November 16 when pleas of guilty were brought in. Three of the defendants were fined as follows: Franklin Miles, \$200; Albert R. Beardsley, \$100; and Andrew H. Beardsley, \$100.

THROUGH the authorization of the Secretary of War, the Surgeon-General of the Army has organized a body of 100 army surgeons for service in the hospitals of Rumania, under Col. Walter D. McCaw of the regular army. The Rumanian government has been notified concerning this matter, and the physicians will report to the American minister at Jassy, Rumania.

IN the monthly letter detailing the Council's consideration of products for the month of October, the product Arsenobenzol (Dermatological Research Laboratories, Philadelphia Polyclinic) was listed as being sold by the "General Laboratories." This was an error; the product is sold not by the "General Laboratories," but by the "General Drug Company, New York."

DR. LORIN W. SMITH, Wabash, who suffered the loss of both legs in an automobile accident several months ago, is making a very good recovery, and has gone to Winterhaven, Fla., where he hopes to recuperate and learn to walk sufficiently well to resume his work next summer. The profession of the state will be glad to hear of his recovery, and to know that the state is not to be denied the service of a man of his capabilities.

IN addition to the 313 regular fellowships conferred by the American College of Surgeons during the year, at the recent annual meeting held in Chicago honorary fellowships were awarded to Surgeon-General Braisted of the navy; Surgeon-General Blue of the Public Health Service; Col. T. H. Goodwin, British attaché of Surgeon-General Gorgas' office; Col. C. U. Derle, French representative, and Sir Berkeley Moynihan, British representative to the congress.

DR. WARNER W. STOCKBERGER, who has charge of the drug and poisonous plant investigation for the Bureau of Plant Industry of the United States Department of Agriculture, has been appointed chairman of a special committee organized by the American Pharmaceutical Association for the purpose of determining a conservative policy in regard to the stimulation of drug production in the United States, covering especially drugs which at the present time are short on the U. S. market.

DR. FREDERICK A. HENDERSON of Kokomo, for some time stationed at Fort Benjamin Harrison, was married November 1 to Miss Edna Anna Shannon of Montpelier, Ind., an instructor in the Kokomo College of Music. Dr. and Mrs. Henderson left immediately for New York City where he has been ordered to take a course under Dr. Alexis Carrel. Later he will return to Camp Taylor, Kentucky, for base hospital work, and Mrs. Henderson will continue in College instruction at Kokomo.

DR. RICHARD WEIL, New York, major in the Medical Officers Reserve Corps and chief of the medical staff at Camp Joseph Wheeler, Macon, Ga., died of pneumonia on November 19, aged 41 years. Dr. Weil held a professorship in Cornell Medical School, was editor of the *Cancer Research Journal*, pathologist at the German Hospital; assistant director of cancer research at the General Memorial Hospital, and was considered as one of the most active workers in cancer research and an authority on the subject.

MORE than 125 doctors attended the thirty-second meeting of the St. Joseph County Medical Society held at the Oliver Hotel, South Bend, November 14. Drs. A. P. F. Gammack, South Bend; H. O. Mertz, Laporte; A. C. Yoder, Goshen; and Charles A. Varier, South Bend, were among the speakers. Dr. Charles Stoltz, South Bend, gave an address on "Observations of the Physical Make-Up of Our Con-

scripts"; Dr. Wilbur E. Post, Chicago, spoke on "War Conditions in Russia"; and Dr. Archibald Church, Evanston, addressed the society following the banquet in the evening.

THE sixty-seventh annual meeting of the Kentucky State Medical Association was held in Louisville November 8 and 9, under the presidency of Dr. Milton Board. Officers for 1918 are: President, Dr. J. S. Lock, Maysville; first vice-president, Dr. J. L. Barker, Pembroke; second vice-president, Dr. H. H. Stallard, Pikeville; third vice-president, Dr. J. C. Douglas, Franklin; orator in medicine, Dr. Philip Barbour, Louisville; orator in surgery, Maj. B. F. Van Meter; and delegates to the American Medical Association were Dr. W. W. Richmond, Clinton, and Dr. C. L. Wheeler, Lexington.

THE next examination of the National Board of Medical Examiners will be held at Bellevue Hospital, New York, January 9 to 17, 1918. The certificate of this board confers many advantages. The holder is given a commission in either the medical corps of the army or navy without further mental examination. Twelve states now recognize the certificate of the board for licensure and as many more will do so as soon as their state examining boards have received authority from the legislatures. All necessary information concerning the examination may be obtained by writing to the secretary, Dr. J. S. Rodman, 310 Real Estate Trust Building, Philadelphia.

THE 44th annual meeting of the Northern Tri-State Medical Association was held at Laporte, November 20 and 21, with three hundred physicians in attendance. Special guests and speakers were Dr. Frank A. Billings of Chicago, who spoke on "Relief Work in Russia"; Dr. Mouliner of Milwaukee, on "Necessity of Standardizing Hospitals"; and Dr. A. J. Ochsner of Chicago, on "After Treatment of Surgical Cases." Officers for 1918 were elected as follows: President, Dr. J. M. Jacobson, Toledo; vice-president, Dr. C. V. Brown, Detroit; treasurer, Dr. H. F. Mitchell, South Bend, and secretary, Dr. George W. Spohn, Elkhart. The 1918 meeting will be held at Detroit, Mich.

THE November number of the *Kentucky Medical Journal* is a "Historical Number," and is highly creditable to the editor and publishers in every particular. The issue contains more

than 170 pages, and is largely a compilation of biographic sketches recording the professional work of medical pioneers of Kentucky. It is freely illustrated with some remarkable photographs of the pioneer physicians and other interesting pictures; and the recounting of the lives and accomplishments of these medical men can be nothing less than an inspiration for the present and future research work in both the art and science of medicine. This historical number is edited by Dr. J. N. McCormack, and by him is affectionately dedicated "to the members of the medical profession of Kentucky who however humbly, if worthily, are attempting to follow in the footsteps of these pioneers." As before stated, the number is deserving of the highest praise, both from an editorial and general mechanical standpoint.

DR. LUTHER DANA WATERMAN, Indianapolis, who two years ago gave a large sum of money to Indiana University to be used exclusively for research, was honored on his eighty-seventh birthday (November 21) by a telegram sent by Indiana University students and faculty, which was as follows: "On the occasion of your eighty-seventh birthday, the faculty and students of Indiana University, by rising vote, unite in sending you greeting. We remember your years in service as a physician, as a soldier, as a citizen. We remember your part in founding the school of medicine which now makes part of the university. We remember your service to science in the establishment of the Waterman Institute of Research. We remember the originality and courage of your thinking, the strength and felicity of your verse. Finally, we recognize in you a personality whose wisdom, strength and magnanimity account for the worthy deeds of your life. Signed for the faculty and students of Indiana University by William L. Bryan."

THE *New York Medical Journal* of November 17 states that there are 3,180 medical officers, nurses and members of ambulance sections of the United States army now attached to the British and French forces. This total is made up of 870 medical officers and 470 nurses with the British forces and forty ambulance sections, each of forty-six officers and men (a total of 1,840), with the French army. All of this American personnel is loaned to the British and French forces. It is subject to recall, and can, if the War Department so decides, be assigned to duty with the American forces. All wear the uniforms of the United States army. The

plans contemplate the replacement of some of these officers and ambulance sections from time to time by fresh units from the United States and the assignment of the experienced units to the American expeditionary forces. Considerable additions to the number of American ambulance sections attached to the French army are in prospect. Provision has been made for the formation and training of 120 more sections at Allentown, Pa., all for eventual service with the French army.

SURGEON-GENERAL GORGAS of the United States Army has announced the selection of Fox Hills, Staten Island, New York, as the site of the first military receiving hospital from which wounded American soldiers will be distributed to the reconstruction and rehabilitation hospitals soon to be established. This hospital will have a capacity of from 1,500 to 2,500 beds, and will be located on an elevation overlooking the entrance to New York harbor, near enough to the quarantine station to make possible the transfer of the wounded with a minimum of delay. The soldier, disabled in the line of duty, will be received at this hospital, a complete history of his examination made, and then he will be passed on further along the line to the general or special treatment hospital where he will be given light work to aid in convalescence, and, if necessary, given special training for new occupations under the direction of vocational experts. He will be fitted for a trade for which he is particularly adapted. These general and special hospitals are to be located in various parts of the United States, and the soldiers will be sent to places nearest their own homes. These sites will be announced later.

FOLLOWING is the list of physicians who are to constitute the medical advisory boards for each of the local national draft boards as selected by the state nominating committee composed of Drs. Joseph Rilus Eastman, Charles P. Emerson and Albert E. Sterne, all of Indianapolis:

The first name is the chairman of each board:

Adams County—James S. Boyers, Henry F. Costello, Seth D. Beavers, all of Decatur.

Allen—George W. McCaskey, Albert E. Bulson, Jr., B. P. Weaver, J. M. Pulliam, B. W. Rhamy, M. I. Rosenthal, E. H. Kruse, all of Fort Wayne.

Bartholomew—J. W. Benham and E. U. Wood, both of Columbus; W. J. Norton, Hope; G. O. Cosby, Elizabethtown; E. G. Regannas, Hope.

Benton—H. J. Bloom, Oxford; J. L. Morehouse, Arthur LeSage, both of Fowler.

Blackford—Charles A. Sellers, W. A. Hollis, both of Hartford City; James A. Taylor, Montpelier.

Boone—J. R. Ball, Lebanon; Perrin B. Little, Whitestown; H. N. Coons, Lebanon.

Brown—Frank L. Tilton, Nashville; Myron H. Williams, Helmsburg; Alfred J. Ralphy, Mt. Liberty, R. F. D.

Carroll—William R. Quick, Delphi; A. J. Chittick, Burlington; William A. Trobaugh, Cutler; C. E. Carney, Delphi.

Cass—G. D. Miller, J. L. Gilbert, both of Logansport; Z. U. Loop, Galveston; Fred W. Terfinger, C. L. Thomas, John H. Barnfield, all of Logansport.

Clark—Major Peyton, Jeffersonville; John M. Melloy, Sellersburg; F. M. Wells, I. N. Ruddell, both of Jeffersonville.

Clay—William H. VanSandt, Carbon; G. W. Finley, Fred C. Dilley, Luther S. Hirt, all of Brazil.

Clinton—C. A. Endicott, James H. Hadley and M. F. Boul-den, all of Frankfort.

Crawford—Guido B. Hammond, English; Jesse J. Johnson, Milltown; Charles D. Luckett, English.

Daviess—H. C. Wadsworth, T. F. Spink, Charles H. Yenne, all of Washington; Jerome DeMotte, Odon.

Dearborn—H. H. Sutton, Aurora; O. S. Jaquith, Lawrenceburg; Mare L. Bond, Aurora.

Decatur—P. C. Bentle, Clyde C. Morrison, both of Greensburg; Oliver Welch, Westport.

Dekalb—W. F. Shumaker, Butler; F. A. King, Garrett; Francis M. Hines, Auburn.

Delaware—G. W. H. Kemper, C. M. Mix, Hugh A. Cowling, Isaac N. Trent, Clay Ball, H. D. Fair, all of Muncie.

Dubois—John P. Salb, Jasper; W. F. Rust, Holland; Henry Clay Knapp, Huntingburg.

Elkhart—Goshen board, D. L. Miller, Henry W. Eby, Charles L. Dresse, all of Goshen; Elkhart board, B. F. Kuhn, Francis A. Benham, Charles W. Frink, all of Elkhart.

Fayette—R. H. Elliott, Joseph R. Mountain, Frank J. Spill-man, all of Connorsville.

Floyd—P. H. Schoen, William Moore and D. F. Davis, all of New Albany.

Fountain—A. L. Spinning, Covington; Alvin R. Kerr, Attica; George F. Butler, Mudiavia.

Franklin—E. M. Glazer, John William Lucas, Jr., both of Brookville; Philip Lee Moll, Oldenburg.

Fulton—M. O. King, Archibald Brown, George E. Hoffman, all of Rochester.

Gibson—A. I. Ziliak, Robert A. Cushman and Amos H. Rhodes, all of Princeton.

Grant—W. A. Fankboner, George R. Daniels, Joseph Maurer, Charles O. Bechtol, all of Marion.

Greene—W. R. Cravens, Bloomfield; A. T. Custer, Linton; B. F. Chambers, Lyons.

Hamilton—Joel Sturdevant, Noblesville; F. C. Hershey, Carmel; J. P. Heath, Fishers Switch.

Hancock—Oscar Heller, W. A. Justice, both of Greenfield; William H. Larrabee, New Palestine.

Harrison—W. E. Amy, Corydon; Alfred Mathys, Mauck-port; George F. Martin, Corydon.

Hendricks—Charles A. White, Danville; Rilus E. Jones, Clayton; Joel T. Barker, Danville.

Henry—O. E. Holloway, Knightstown; O. J. Gronendyke, H. W. McDonald, J. E. Hiatt, all of Newcastle; Ralph Wilson, Shirley; O. H. Barrett, Knightstown.

Howard—W. H. McClurg, Edgar Cox, Omer Hutto, all of Kokomo; Fred Murray, West Middleton.

Huntington—Charles H. Good, Warren; F. B. Morgan, Fred-erick W. Grayston, both of Huntington.

Jackson—W. M. Casey, George G. Graessle, M. F. Gerrish, L. B. Hill, all of Seymour; Philip A. Zaring, Brownstown.

Jasper—C. E. English, I. M. Washburn, Arthur R. Kreler, all of Remselaer.

Jay—J. E. Nixon, Grant Chaney and George L. Perry, all of Portland.

Jefferson—G. E. Denny, Madison; S. A. Whitsitt, Kent; N. A. Kramer, James W. Milligan, both of Madison.

Jennings—J. Harvey Green, Denis L. McAuliffe, W. H. Richardson, all of North Vernon.

Johnson—L. L. Whitesides, Clarence Province, both of Franklin; R. Day Willan, Trafalgar; John T. Middleton, Edin-burg.

Knox—A. B. Knapp, Vincennes; R. H. Fox, Freelandville; Norman E. Beckes, Vance A. Funk, C. S. Bryan, all of Vin-cennes; T. M. Staley, Bicknell.

Kosciusko—C. N. Howard, C. W. Burket, Jacob D. Richer, all of Warsaw.

Lagrange—D. W. Dryer, William H. Short, both of Lagrange; Frank C. Wade, Howe.

Lake—E. M. Shanklin, W. F. Howat, George W. Farver, all of Hammond; Charles A. DeLong, C. M. Ryher, Frank W. Smith, all of Gary; Frank Townsley, Robert Spear, both of East Chicago; Robert Ansley, William Lloyd Hughes, both of Indiana Harbor; William F. Houk, George D. Brannan, J. K. Blackstone, all of Crown Point; George H. Hoskins, William E. Putnam, E. K. Newton, all of Whiting.

Laporte—Bo Howell, Eber L. Annis, both of Laporte; Paul Bowers, Michigan City; Charles B. Danruthers, H. O. Mertz, both of Laporte; John Nelson Kelley, Westville.

Lawrence—J. D. Heitger and Charles H. Emory, both of Bedford; John A. Gibbons, Mitchell; John R. Pearson, Bedford.

Madison—Horace E. Jones, Edward W. Chittenden and May-nard Austin, all of Anderson; Grant Newcomer, M. L. Plough and John W. Cook, all of Elwood.

Marion, Board No. 1, North Side—S. E. Earp, Murray Had-ley, C. F. New, Albert M. Cole, Homer Hamer, F. C. Heath, Harry Langdon, all of Indianapolis. Board No. 2, South Side—Henry F. Beckman, Max Bahr, A. L. Marshall, Robert Kemper, all of Indianapolis; W. P. Garshwiler, Southport; E. O. Lindenmuth, Bernard Erdman, both of Indianapolis.

Marshall—Charles E. Reed, Culver; Lorenzo D. Eley, Charles F. Holtzendorff, both of Plymouth.

Martin—John Larkin, J. C. Trueblood, both of Loogootee; Henry M. Shirley, Shoals.

Miami—Charles J. Helm, W. A. Hammond, Ellis H. Andrews, all of Peru.

Monroe—B. D. Myers, P. C. Holland, C. E. Harris, R. D. Smith, Homer Woolery, all of Bloomington.

Montgomery—Samuel L. Ensinger, B. F. Hutchings, both of Crawfordsville; Samuel R. Peacock, Ladoga; George P. Ramsey, Henry Green, Paul J. Barcus, all of Crawfordsville.

Morgan—W. J. Sandy, Robert H. Egbert, both of Martins-ville; William L. Thompson, Mooresville.

Newton—L. H. Recker, Morocco; Richard McCain, G. H. VanKirk, both of Kentland.

Noble—C. B. Goodwin, Joseph L. Gilbert, both of Kendall-ville; Walter F. Carver, Albion.

Ohio—George H. Hansell, O. P. M. Ford, John Eifers, all of Rising Sun.

Orange—W. W. Sloan, French Lick; C. L. Boyd, Paoli; William E. Ryan and Lynn Rogers, both of French Lick.

Owen—Allen Pierson, Spencer; George E. Willoughby, Gos-port; John H. Plew, Freedom.

Parke—George Sherman Blake, Rockville; Harvey Stewart, Rosedale; Fred G. Green, Bloomingdale.

Perry—Fred N. Williams, Tell City; M. F. Wedding, Can-nelton; Fred C. Glen, Tell City.

Pike—John T. Kine, W. M. Hunter, Oliver A. Byers, all of Petersburg.

Porter—R. D. Blount, George R. Douglas, both of Valpa-raiso; Philip D. Noland, Kouts.

Posey—John E. Doerr, D. C. Ramsey, both of Mt. Vernon; T. W. Wilson, New Harmony; C. H. Fullenwider, Mt. Vernon.

Pulaski—George W. Thompson, Leonard P. Collins, both of Winamac; Frank L. Sharrer, Francesville.

Putnam—William W. Tucker, Walter M. McGaughey, W. R. Hutcheson, all of Greencastle; W. D. Conn, Bainbridge.

Ripley—C. E. Holton, Holton; J. R. Pate, Milan; George T. Beckett, Versailles.

Randolph—Granville Reynard, Union City; F. A. Chenoweth and Edgar W. Rine, both of Winchester.

Rush—J. C. Sexton, Dawson D. VanOsdon, William C. Smith, all of Rushville.

St. Joseph—South Bend board: Charles E. Varier, Charles Stoltz, Charles S. Rosenbury, Walter A. Hager, Edwin P. Moore, Harry F. Mitchell, Hugh M. Miller, all of South Bend; Mishawaka board: W. E. Borley, H. J. Graham, Leo P. VanRie, all of Mishawaka.

Scott—A. E. McCough, Levi McClain and J. P. Wilson, all of Scottsburg.

Shelby—S. Kennedy, Walter C. McFadden, Franklin E. Ray, Bayard G. Kenney, all of Shelbyville.

Spencer—Henry W. Weiss, James M. Dailey, both of Rock-port; R. R. Rhodes, Eureka; Daniel C. McClary, Dale.

Starke—Perry O. Englerth, Albert Fisher, both of North Judson; Stephen I. Brown, Knox.

Steuben—Thomas J. Creel, Sherman S. Frazier, both of Angola; John F. Cameron, Hamilton.

Sullivan—J. R. Crowder, W. N. Thompson, Carl F. Briggs, all of Sullivan; Frederick M. Dukes, Dugger.

Switzerland—Lowery H. Baer, R. M. Copeland, John H. Shadday, all of Vevay.

Tippecanoe—H. J. Laws, C. B. Kern, Frank S. Crockett, Richard B. Wetherill, George F. Keiper, E. B. Ruschi, all of Lafayette.

Tipton—Martin V. B. Newcomer, Andrew S. Dickey, H. G. Read, all of Tipton.

Union—W. H. Hawley, College Corner, O.; Garrett Pigman, Liberty; W. C. Sherman, Brownsville.

Vanderburg—A. M. Hayden, Carl G. Viehe, J. N. Baughman, Charles E. Laughlin, Benjamin Floyd, Edwin Walker, Charles L. Seitz, all of Evansville.

Vermilion—Charles E. Ragan, Clinton; O. M. Keyes, Dana; Isaac White, Clinton.

Vigo—Charles Wyeth, James McCall, E. L. Larkins, Otto Spigler, Frank G. McCarthy, Amos H. Caffee, Charles N. Combs, all of Terre Haute.

Wabash—E. J. Siegmund, L. A. Sholty, James Wilson, all of Wabash.

Warren—Florin H. Pugh, West Lebanon; S. S. Delancy, Williamsport, Richard Stephenson, West Lebanon.

Warrick—P. N. Hoover, Norman M. Spradley, both of Boonville; Dalton Wilson, Newburg.

Washington—C. B. Paynter and Charles W. Murphy, both of Salem; Alonzo H. Ralston, Fredericksburg.

Wayne (Richmond)—Charles S. Bond, A. J. Wballon, Allen L. Brankamp.

Wayne (Outside)—J. N. Study, H. B. Boyd, Willis R. Littell, all of Cambridge City.

Wells—Louis Severin, Samuel A. Shoemaker, John L. Redding, all of Bluffton.

White—H. B. Gable, Monticello; George R. Clayton, Monon; J. D. McCann, Monticello.

Whitley—O. V. Shuman, Columbia City; O. P. Franks, Churubusco; E. L. Eberhard, South Whitley.

illegal practice he will say that the Board has no funds with which to prosecute. If it is an M.D. the Board gets after him.

An osteopath practiced medicine for two years without a license, and reported that he was practicing under a member of the Board who lived at a distance. This is not lawful according to the ruling of the attorney-general.

How long, oh, how long can justice be made a sham! Why can't our state medical association see that funds are appropriated and an attorney employed to look into this flagrant violation of the medical laws whenever the Board does not do so?

Respectfully,

O. F. WELCH.

CORRESPONDENCE

NOTICE TO MEMBERS OF THE EYE, EAR, NOSE AND THROAT SECTION

At the Evansville meeting of the Indiana State Medical Association a committee was appointed to consider the advisability of holding a mid-winter meeting of the section at Indianapolis, and a favorable report was adopted.

This will not conflict with our regular meetings at the time of the state association session, but rather it is to be held with the view of organizing an Indiana ophthalmological and otolaryngological society.

Plans are now being made to hold this meeting in February, 1918.

Suggestions concerning the meeting and prof-fers of papers for the program should be sent to the secretary at an early date.

J. R. NEWCOMB, Indianapolis,
Chairman

E. M. SHANKLIN, Hammond,
Secretary

ILLEGAL PRACTICE OF MEDICINE

WESTPORT, IND., Nov. 26, 1917.

Editor THE JOURNAL:

I see that you have sounded a note of complaint concerning the non-enforcement of laws governing the practice of medicine in Indiana. Isn't it a shame and disgrace that our medical laws are not enforced? I don't think our State Board of Medical Registration and Examination cares. If you write the secretary concerning

NOTICE TO COUNTY MEDICAL SOCIETY SECRETARIES

INDIANAPOLIS, Dec. 5, 1917.

To County Secretaries:

We are off in the One Hundred Per Cent. Club race.

Are you coming down the stretch in the lead, or will you be classed among the "also rans"?

The honors in the One Hundred Per Cent. Club contest go to that county society which first reports a full paid-up membership for 1918. We shall list the various counties in the order in which they send us their membership dues, and this list will be published in THE JOURNAL. It simply means that if you want to get ahead of your neighboring counties, see your members at once; get their dues now instead of a month from now and send them to us.

Pull for the standing of your society. The first list to be published in THE JOURNAL will include the standing of all county societies as received in this office up to January 15. Remember EARLY work does it; doing NOW what otherwise might be permitted to extend over two months.

The winner will have the satisfaction of seeing his county head the list. You certainly will not care to be found down near the bottom. Due allowance will be made for losses in membership occasioned by the departure of doctors for military service.

ALTOGETHER NOW! LET'S GO!

FREDERICK E. SCHORTEMEIER,
Executive Secretary.

SOCIETY PROCEEDINGS**BARTHOLOMEW COUNTY**

Bartholomew County Medical Society met in regular session in office of Dr. F. D. Norton, Columbus, October 9, and was called to order by Dr. George T. McCoy, president pro tem.

A communication was read from Mr. F. T. Schortemeier, state executive secretary, asking for date to speak before the society, and secretary was instructed to invite him for the near future, date to suit his convenience.

Dr. George F. Cline read the paper of the evening on "LaGrippe." The subject was covered thoroughly, and the latest treatment outlined. Dr. F. D. Norton opened the discussion, and was followed by a number of other doctors.

Dr. Warman of Clinton was a visitor.

We think we have one of the best medical societies in the state. If you don't think we have some "live wires" come down some time and make us a visit. We meet the second Tuesday of each month at 8 p. m. The latch-string always is on the outside.

JAMES W. BENHAM, Secretary.

BENTON COUNTY

Benton County Medical Society met at the residence of Dr. H. G. Bloom, Oxford, on November 9.

At this meeting motion was carried to remember the members of this society who are at the front in the United States Army with an appropriate Christmas treat.

Dr. Ward A. Smith of Otterbein was reelected president of the society and Dr. H. G. Bloom, Oxford, was reelected secretary for the ensuing year. This honor was bestowed in recognition of the efforts of these officers in securing a perfect membership of every physician in the county, and maintaining the best attendance at the meetings in the history of the society. An unusual spirit of good professional fellowship exists in this society.

The next meeting will be held at Boswell in January, 1918.

Adjourned. H. G. BLOOM, Secretary.

MADISON COUNTY

Madison County Medical Society met in Anderson High School auditorium, November 27, at 4 p. m., Dr. Jones, president, in the chair. A motion was carried that the society ask for whole-time health officer, that he be a member of the society, and that records be kept at the county seat.

Dr. Rulus Eastman of Indianapolis gave an illustrated lecture on war surgery, and he was introduced by Dr. Will Moore of Summitville, who had served with Dr. Eastman in war hospital in Vienna, Austria. Dr. Eastman stated that casualties among medical men were not great; and advised doctors not to give up their practices until the final call came. Dr. Lewis F. Mobley, captain in the Medical Officers Reserve Corps, told of the training they are receiving at Fort Oglethorpe, Ga., where he is stationed. He stated that men who are in training are there for business; they come from the best medical schools of the country; and thirteen different states are represented in the camp. About fourteen hours per day are spent in training.

Dr. G. W. H. Kemper, conncillor of the Eighth District, was present, as also other visitors from Muncie, Fairmount and Middletown.

Adjourned. SETH IRWIN, Secretary.

POSEY COUNTY

The regular meeting of the Posey County Medical Society was called to order in Odd Fellows Hall at Wadesville, October 17, by President Arburn.

Minutes of previous meeting read and approved.

Report of Evansville session of Indiana State Medical Association was made by Dr. D. C. Ramsey, delegate.

Dr. A. W. Woods reported two interesting cases of tetanus, and dwelt at length on treatment. The discussion was general and instructive.

By motion of Dr. Ramsey the president was authorized to appoint a committee of five whose duty is to keep in touch with affairs political pertaining to medicine and to cooperate with the state executive secretary in matters of interest to the profession. Drs. Gudel, Boren and Ramsey were appointed on the committee, with the president and secretary members ex-officio.

Eight members and one visitor, Dr. Wilhelmus, were present.

Adjourned. C. L. RAWLINGS, Secretary.

TIPPECANOE COUNTY

Tippecanoe County Medical Society met in regular session at the Council Chamber with eleven members present, and President Driscoll in the chair.

The secretary being absent, Dr. J. C. Burkle was chosen secretary pro tem.

Minutes of last meeting read and approved. Dr. George F. Keiper was appointed to formulate comment on the sermon and the attendance of the profession at the funeral of Dr. Webster, and to present copies of same to proper persons. Legislative committee was appointed as follows: Dr. Tea, Dr. Campbell, Dr. Crockett, and the president and secretary members ex-officio.

Dr. F. S. Crockett, Lafayette, gave an instructive talk on "Preventable Prostatic Death," laying special emphasis on the gradual emptying of the distended bladder, at the same time giving patient water, freely, to drink. Many cases following the catheter route and to soon die can be saved, and many inoperable cases can be made operable by such treatment. Some cases who have had to use the catheter reach the place where they urinate normally and suffer little if any discomfort for years. Hemorrhage and nephritis are prevented by gradual emptying of bladder.

The paper was discussed by Drs. Tea, Campbell, Beasley, Bauer, Lairy and Driscoll.

Adjourned. J. C. BURKLE, Secretary pro tem.

THE TRUTH ABOUT MEDICINES**NEW AND NONOFFICIAL REMEDIES**

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

PARAFFIN FOR FILMS (SURGICAL PARAFFIN, PLASTIC PARAFFIN).—Paraffin intended for application to burns, etc., should be more ductile and pliable than the official paraffin, and be liquid at or below 50 C. Thin films should be pliable at or below 28 C. and ductile at or below 31 C. and somewhat adherent to the skin. Paraffin for films is used mainly in the treatment of burns. It is used also to prepare "paraffin

covered bandages" and to seal gauze dressings. In the paraffin treatment of burns, the wound is cleaned and dried; a thin coating of liquid petrolatum or melted paraffin for films is applied, and is followed by a thin layer of cotton and another layer of cotton; another layer of melted paraffin is applied, and the whole then bandaged.

STANOLIND SURGICAL WAX.—A brand of paraffin for films melting at 47 C., being pliable at or below 25 C. and ductile at or below 29 C. Standard Oil Company of Indiana, Chicago (*Jour. A. M. A.*, Nov. 3, 1917, p. 1525).

SILVER PROTEIN-SQUIBB.—A compound of silver and gelatin, containing from 19 to 23 per cent. of silver in organic combination. Like other silver protein compounds, it is used in from 1 to 25 per cent. or stronger solutions for prophylaxis and treatment of the sensitive mucous membranes, particularly in gonorrhea, conjunctivitis and other infections of the urethra and of the eye, ear nose and throat. E. R. Squibb and Sons, New York.

ARSENOBENZOL (DERMATOLOGICAL RESEARCH LABORATORIES).—A brand of arsenphenol-amine hydrochloride. Its actions, uses and dosage are the same as those of salvarsan. It is supplied in ampules containing 0.6 Gm. The General Drug Co., New York City.

ACETYSALICYLIC ACID-MILLIKEN.—A brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. It is sold only in the form of 5 grain capsules and 5 grain tablets. John T. Milliken and Co., St. Louis, Mo.

ACETYSALICYLIC ACID (ASPIRIN), MONSANTO.—A brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. Monsanto Chemical Works, St. Louis, Mo. (*Jour. A. M. A.*, Nov. 17, 1917, p. 1695).

PROPAGANDA FOR REFORM

"PATENT MEDICINES" HERE AND IN CANADA.—The federal law governing the interstate sale of "patent medicines" prohibits false and misleading statements in regard to composition and origin and false and fraudulent therapeutic claims. The Canadian law offers no protection against false, misleading or fraudulent statements that may be made for products of this class. As a result, many claims made for "patent medicines" when sold in Canada are not made when the same preparations are sold in the United States. An examination of Dodd's Kidney Pills, Doan's Kidney Pills, Williams' Pink Pills for Pale People, Paine's Celery Compound, Hall's Catarrh Medicine, Hood's Sarsaparilla, Dr. Chase's Nerve Pills, and Gino Pills as sold here and in Canada leads to the conclusion that the "patent medicine" industry as a whole is founded on falsehood, and that misleading and false claims will be made for such preparations, at least in the majority of cases, just so long as manufacturers are subject to no restraint except their own consciences (*Jour. A. M. A.*, Nov. 10, 1917, p. 1636).

SHOTGUN VACCINES FOR COLDS.—There is no reliable evidence for the value of mixed vaccines in the prevention or treatment of common "colds" and similar affections. The Council on Pharmacy and Chemistry accepted for New and Nonofficial Remedies mixed vaccines only on condition that their usefulness has been established by acceptable clinical evidence. So far it has not admitted any of the "influenza" or "catarrhal" mixed vaccines (*Jour. A. M. A.*, Nov. 10, 1917, p. 1642).

IODEOL AND IODAGOL.—Iodeol and Iodagol (formerly called Iodogol) are the products of E. Viel and Company, Rennes, France. They have been widely and extravagantly advertised in the United States as preparations containing colloidal, elementary iodine, and with the claim, that, because of the colloidal state of the iodine, they possessed the virtues but not

the drawbacks of free iodine. As the result of chemical examination, pharmacologic, bacteriologic and clinical investigation and a study of the submitted evidence, the Council on Pharmacy and Chemistry declared the products inadmissible to New and Nonofficial Remedies because they did not contain the amounts of iodine claimed; because the iodine was not in the elementary or free condition but behaved like fatty iodine compounds, and because the therapeutic claims were exaggerated and unwarranted. The American agents, David B. Levy, Inc., announce that the sale of Iodeol and Iodagol has been discontinued (*Jour. A. M. A.*, Nov. 17, 1917, p. 1725).

THE CARREL-DAKIN WOUND TREATMENT.—Arthur Dean Bevan holds that the value of the Carrel-Dakin method of treating infected wounds has not been established. He has been forced to the conclusion that Carrel's work does not meet the requirements of scientific research. Bevan believes that the choice of antiseptics in the treatment of infected wounds is of little moment, and that the use of the Carrel-Dakin fluid, like Koch's lymph, Bier's hyperemia and the vaccine therapy of acute infections, will have a short period of popularity (*Jour. A. M. A.*, Nov. 17, 1917, p. 1727).

SPHAGNUM MOSS. A SURGICAL DRESSING.—In England, sphagnum moss, or peat moss, is being used as a substitute for absorbent cotton. The dried moss is said to absorb twenty-two times its own weight of water, while absorbent cotton will not absorb more than six times its weight. For surgical use the dried moss is packed loosely in muslin bags which are then sterilized by heat or chemicals such as mercuric chloride (*Jour. A. M. A.*, Nov. 24, 1917, p. 1790).

ADULTERATED IMPORTED DRUGS.—The U. S. Department of Agriculture announces action against imports of adulterated drugs. Belladonna root was adulterated with yellow dock; cantharides was adulterated with so-called Chinese blister flies, and cinchona bark offered for entry was deficient in alkaloid. Other drugs were illegally labeled (*Jour. A. M. A.*, Nov. 24, 1917, p. 1792).

BELL-ANS (PA-PAY-ANS, BELL).—Bell-ans, formerly advertised as Pa-pay-ans (Bell) in medical Journals, is now advertised in newspapers and in medical journals. Among the extravagant claims made for this preparation is the claim that there is no derangement of the digestive organs on which the proper dose of Bell-ans will not act quickly and pleasantly. Instead, proper treatment must aim to determine the cause and attempt its removal, the choice of drugs depending on the conditions that give rise to indigestion. The treatment of indigestion by a single prescription or combination is wholly irrational. While Bell-ans, under its old and new name, has been alleged to contain papain or to be some preparation of the digestive juice of the fruit of *Carica papaya* with other substances, chemists have failed to find papain or to determine the digestive power of the tablets. Bell-ans is essentially a tablet of sodium bicarbonate and ginger, and has all of the virtues, which are few, and all of the limitations, which are many, of a tablet of sodium bicarbonate and ginger. The Council on Pharmacy and Chemistry examined Bell-ans nearly eight years ago, and the statements made in that report are as incontrovertible today as they were then (*Jour. A. M. A.*, Nov. 24, 1917, p. 1815).

THE HANDICAP OF PROPRIETORSHIP IN MEDICINE.—Dr. J. J. Mundell protests because his article on the present status of pituitary extract in labor was abstracted in "Therapeutic Notes" in a way which appears to him a gross misrepresentation of his attitude toward the use of pituitary extract. Being a house organ, "Therapeutic Notes" contained only those portions of Mundell's article which may be expected to promote the firm's proprietary pituitary preparation. The references to the dangers and the limitations of pituitary extracts were not abstracted (*Jour. A. M. A.*, Nov. 24, 1917, p. 1818).

SALVARSAN, ETC.—Besides the German salvarsan and neosalvarsan, now practically unobtainable, the Council on Pharmacy and Chemistry has recognized diarsenol, neodiarsenol and arsenobenzol (Dermatologic Research Laboratories). It has under consideration salvarsan made by the Farbwerke-Hoechst Company, New York. Before accepting these preparations, the Council requires evidence to show that the products are manufactured under supervision which may be expected to insure their chemical identity and uniformity, and freedom from toxicity. However, in the past, untoward effects have been reported from German salvarsan and neosalvarsan, particularly with the last shipments of neosalvarsan. Recently untoward effects have been reported from neodiarsenol. It is expected that within a short time all salvarsan, neosalvarsan and the various products identical with these will be tested by the government (*Jour. A. M. A.*, Nov. 24, 1917, p. 1819).

BOOK REVIEWS

THE MEDICAL CLINICS OF NORTH AMERICA. Vol. I, Number 2 (Philadelphia Number), September, 1917. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

This issue contains a series of very instructive clinics by sixteen of the best known clinicians of Philadelphia. The clinics cover such a wide range of medical subjects that many valuable points covering many different clinical conditions are brought out and duly emphasized. It is needless to give in detail the names of the clinicians and the subjects they present. Every up-to-date, progressive physician has no doubt already gone over this number. Those who have not ought to lose no further time in becoming acquainted with the clinics and following them up in each successive issue.

FIRST LESSONS IN SPOKEN FRENCH FOR DOCTORS AND NURSES. By Ernest H. Wilkins, Algernon Coleman and Ethel Preston. Cloth, 54 cents postpaid. The University of Chicago Press. Chicago, 1917.

The authors of this new little French text are members of the Department of Romance Languages and Literatures of the University of Chicago. Their purpose in presenting this book is to enable our physicians and nurses to acquire enough of the French language to meet their needs in their service in France. To one entirely ignorant of French it would be no easy matter to teach himself much of the language from this text, for, although this is a very elementary book, it is not plain or simple enough for the beginner. Obviously to one who is not a beginner in French this book offers hardly anything of value.

THE SURGICAL CLINICS OF CHICAGO. Vol. I, Number 5, October, 1917. With 84 illustrations. Paper. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

This issue contains some 200 pages of surgical clinics by sixteen different surgeons of Chicago, most of whom are men of national fame. A wide variety of subjects are presented, every one of them of considerable interest, and some of unusual interest and importance.

Those who follow these clinics from issue to issue and appreciate how much of real value it brings to them would not hesitate to advise those who do not to become acquainted with these surgical clinics at their earliest opportunity.

MEDICAL AND SURGICAL REPORTS OF THE EPISCOPAL HOSPITAL, Volume IV. Philadelphia Press of Wm. J. Dornan, 1916.

This volume, whose publication was made possible by the generosity of a friend, is of general interest chiefly because of the brief appreciation of John Ashurst, Jr., contained therein. The chapters describing the organization and history of so prominent an institution as the Episcopal Hospital of Philadelphia must also be of some interest to all the profession. But it has always seemed to the reviewer that the diffusion of effort attendant on the publication of strictly medical papers in such volumes of hospital reports was deleterious. Certainly medical literature would be enriched by limiting the number of publications—even though they contain articles of definite value.

MUSKETS AND MEDICINE, or Army Life in the Sixties. By Charles Bevenlyn Johnson, M.D. Cloth, \$1.50 net. Philadelphia, 1914-16 Cherry Street, F. A. Davis Company, Publishers, 1917.

In this book the writer gives a very interesting account of his experience in the Civil War. It is of general interest at present because it brings to the reader many sidelights of those critical times, and it is of special interest to medical men because the author served in the enlisted personnel of the Medical Department of the Union Army. He has the gift of an easy-going and entertaining style, so that he holds the attention of his reader from the beginning of his narrative to the end. There are quite a few illustrations of much historical value.

This is a splendid book for every medical man to read and possess.

PRACTICE OF MEDICINE. A Manual for Students and Practitioners. By Hughes Dayton, M.D., Associate Attending Physician, New York Hospital; Attending Physician, Hudson Street Hospital; Formerly Instructor in Physical Diagnosis, Cornell University Medical School, New York. Third revised edition. Cloth, \$1.50. Lea & Febiger, Philadelphia and New York, 1917.

This manual on Practice is already known to quite a large following. The fact that it has gone through a third edition testifies to its popularity. In the present edition the book has been entirely revised. The author has included in it all the principal changes necessitated by the advances made in Internal Medicine since the last edition of this book. The author acknowledges his indebtedness to Dr. Prudden for the latter's "introductory remarks on immunity."

Many students and physicians will find this volume very useful and of much value.

THE MASTERY OF NERVOUSNESS, Based on Self Education. By Robert S. Carroll, M.D., Medical Director Highland Hospital, Asheville, N. C.; 315 pages. The Macmillan Company, New York, 1917.

In a manner that at times tires by its prolixity and that almost precludes reading the text aloud because of an astonishingly fixed habit of alliteration, Dr. Carroll gives expression to a well grounded protest against the "restlessness" with which we live; its attendant evils and its disastrous results. Too much brain, too little muscle, improper diet, improper methods of eating, exercising, playing and working—all come in for their share of blame in making us men of "nerves" instead of men of "nerve." The author has obviously had unlimited opportunity for studying

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"nervousness"—and his suggestions for aiding in its relief are both scientific and practical. The work is decidedly readable, with many touches of epigrammatic humor—and full of descriptions of symptoms of "nervousness" that make it possible "to see ourselves as others see us."

Every nervous man should read it.

GENERAL MEDICINE. Volume VI of the Practical Medicine Series for 1917. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College; assisted by Burrell A. Raulston, A.B., M.D., Resident Pathologist Presbyterian Hospital. Cloth, \$1.50. Price of series of ten volumes, \$10. The Year Book Publishers, Chicago.

The publisher's note informs us that because of the absence of Dr. Billings the final revision of the manuscript for this volume was done by Dr. Raulston, the assistant editor, and Dr. Mix, the general editor of this series.

A complete review is given of infectious diseases, diseases of the gastro-intestinal tract, of the liver and gallbladder, and of the pancreas. Quite a good deal of new material is brought out in this volume. It would be not only very interesting but very profitable for all interested physicians to know the many new points brought out in this review.

Again criticism must be made of the evident lack of care in the proof reading of some of these issues of the Practical Medicine Series. Were this carried out as thoroughly and carefully as it should be it would add beyond measure to the full value of this work.

PRACTICAL TREATMENT. Volume IV. By seventy-six eminent specialists. Edited by John H. Musser, Jr., M.D., Associate in Medicine, University of Pennsylvania; and Thomas C. Kelly, M.D., Instructor in University of Pennsylvania. Desk Index to the complete set of four volumes sent with this volume. Octavo 1000 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$7.00 net; half morocco, \$8.50 net.

The fourth volume—containing the therapy developed in more recent years—maintains the standard of the three previous volumes. No volume of this size and completeness can contain the newest treatment in the strictest sense of the term because of the time necessarily consumed by its production. Every practitioner, however, needs such a reference work as this to which to refer for the established indications in therapy. The number and standing of the contributors assure fulness and accuracy.

Of particular interest to the reviewer were the chapters on the high caloric diet in typhoid, the starvation treatment of diabetes—and an excellent chapter by Goldthwait on the Postural Treatment of the Abdominal and Visceral Thoracic Disturbances.

As evidence of the rational modern tendency to prevent rather than to "cure" disease, this volume contains an admirable chapter by W. Gilman Thompson on the Prophylaxis and General Treatment of the Occupational Diseases.

Accompanying the fourth volume is the desk index, of convenient size and with the subject matter clearly and minutely indexed.

Taken in its entirety Musser and Kelly is the best work on practical therapy available today.

PREVENTIVE MEDICINE AND HYGIENE. By Milton J. Rosenau, Professor of Preventive Medicine and Hygiene, Harvard; Director of the School for Health Officers of Harvard University and the Massachusetts Institute of Technology; Formerly Director of the Hygienic Laboratory, U. S. Public Health Service, etc. With chapters on Sewage and Garbage by George C. Whipple, Professor of Sanitary Engineering, Harvard; Vital Statistics by John W. Trask, Assistant Surgeon-General U. S. Public Health Service; Mental Hygiene, by Thomas W. Salmon, Medical Director, National Committee for Mental Hygiene, etc. Third edition. Containing a special section on Military Hygiene. Cloth, \$6.50 net. New York and London. D. Appleton and Company, 1917.

This third edition has been prepared to meet the needs of the present emergency. It may, therefore, be regarded as a special or military edition. It contains a special section of 120 pages devoted to military hygiene, in which are given briefly and very clearly the duties of the sanitary officers in the military service.

The author also discusses the peculiar medical conditions which have had their origin in the present war, such as trench fever, trench foot, war nephritis, shell shock and gas poisoning. Tuberculosis and venereal diseases in their relation to the military forces are also considered.

The remainder of this work is too well known to require much comment. It has already gained the reputation as perhaps the foremost work on preventive medicine and hygiene to be had at present. This new edition will enhance its value and serve to make it a much more popular book than it has been heretofore.

POLIOMYELITIS IN ALL ITS ASPECTS. By John Rührh, M.D., Professor of Pediatrics in the University of Maryland Medical School and the College of Physicians and Surgeons; Consulting Pediatricist to the Bayview Hospital and to the Church Home and Infirmary, etc., and Erwin E. Mayer, M.D., First Lieutenant in the Medical Officers' Reserve Corps, United States Army; Former Senior Resident Physician at the Mercy Hospital; Instructor of Medicine in the University of Maryland Medical School and College of Physicians and Surgeons. Illustrated with 118 engravings and two plates. Price, \$3.25. Lea & Febiger, Philadelphia and New York, 1917.

The 1916 epidemic of poliomyelitis with the opportunity it afforded of intimate study by advanced scientific methods made the publication of such a work as this almost a necessity.

Probably no epidemic disease has been so little understood or so badly misunderstood by the profession at large. Indeed some of the misconceptions were universal before the New York epidemic.

In addition to its value as a general textbook and reference work on poliomyelitis this volume serves a special purpose in emphasizing the following points: That so far as our present knowledge goes the disease is spread only by human carriers; that mild and missed cases as well as healthy carriers afford the greatest menace to its control; that many if not the majority of the cases show no paralysis; that early examinations of the spinal fluid afford an excellent diagnostic aid; that diagnosis can *commonly* be made before the onset of paralysis; and that treatment with

serum must be very early if it is to be beneficial. In the consideration of later treatment an excellent chapter on muscle training, profusely illustrated, is included. At the beginning of the chapter on operative treatment the authors say "All operations . . . should be undertaken only by one skilled and specially trained in orthopedic surgery." It might have been well to amplify that statement to read "All treatment (of the after-effects) should be undertaken only by the skilled and specially trained orthopedist"—for the general practitioner and general surgeon are ill-fitted for procedures so time-consuming and necessarily exact.

DISEASES OF WOMEN. By Harry Sturgeon Crossen, M.D., F.A.C.S., Associate in Gynecology, Washington University Medical School, and Associate Gynecologist to the Barnes Hospital; Gynecologist to St. Luke's Hospital, Missouri Baptist Sanitarium and St. Louis Mullanphy Hospital; Fellow of the American Gynecological Society and of the American Association of Obstetricians and Gynecologists. Fourth edition, revised and enlarged; with eight hundred engravings. Cloth, \$7.50. St. Louis, C. V. Mosby Company, 1917.

This work already is quite well known and has received the most favorable editorial notice on the occasion of the previous editions. Although only four years have elapsed since the last edition, the author has felt obliged to revise the work and to bring it fully up to date. In his prefatory note he states that the two principal additions in this revised edition are (1) numerous drawings and photomicrographs illustrating gynecologic pathology, and (2) a chapter on the ductless glands in their relation to gynecology. This chapter is the work of Dr. Hugo Ehrenfest, Professor of Obstetrics and Gynecology in the St. Louis University. The latter also completed the preparation of the manuscript for this edition at the request of the author, who was called to active duty in the army after he had barely started on the work himself.

This new volume includes all the latest advances in the science and practice of diseases of women, and all the important points are presented clearly and systematically. Indeed the unique systematic arrangement of the subject matter that this author has planned serve to make this work stand out most conspicuously as one of the very best modern texts on this subject. The large number of splendid illustrations, one of the two principal features of this new edition, add tremendously to the quality and value of the work.

Syphilis and the Wassermann test in their relation to diseases of women receive rather scant discussion in this volume. In view of the increasing interest in and knowledge of syphilis in its bearing on gynecology more attention must be devoted to that subject by writers in their new works.

No mention is made of Harrar's method of treating streptococcic puerperal septicemia by intravenous injections of magnesium sulphate. The reviewer feels from his experience that this is a very valuable method of treatment in some cases, and that it should be not only advised but urged.

This new volume will be of the greatest value to a very large group of practitioners. It goes without saying that it will meet with an enormous popularity.

INDEX TO VOLUME X

ORIGINAL ARTICLES	PAGE		PAGE
Abdominal Wounds in War.....	417	FOXWORTHY, FRANK W., Indianapolis (Gastro-Intestinal Diseases Along the Border).....	225
Accessory Sinuses, Errors in Diagnosis of Diseases of the.....	143	Gallbladder, Diagnosis of Diseases of the.....	457
Bacteriology of Mastoiditis, The.....	342	Gallbladder, Diseases of the; Medical Treatment..	460
BEASLEY, GEORGE F., Lafayette (The Evolution of a Splint for the Femur).....	276	Gallbladder Surgery	463
BEELER, R. C., Indianapolis (The Roentgen-Ray Diagnosis of Pulmonary Tuberculosis).....	18	Gastric Disorders, The Diagnosis in Certain....	10
Blindness and Deafness, Pretended, and Their Detection	422	Gastro-Intestinal Diseases Along the Border....	225
BONN, H. K., Indianapolis (Coagulen—Kocher-Fonio)	385	HEITGER, JOSEPH D., Bedford (Diagnosis of Maxillary Sinuitis).....	232
BRAYTON, FRANK A., Indianapolis (A Report of Venarsen in the Treatment of Syphilis)....	339	HENRY, ALFRED, Indianapolis (Tuberculosis Plus)	59
BULSON, ALBERT E., JR., Fort Wayne (Conservative Treatment of Penetrating Wounds of the Eyeball)	307	HOWARD, C. NORMAN, Warsaw (A Review of Prescription Work).....	317
Cataract, Some Observations Concerning, and Its Management	390	HUGHES, W. F., Indianapolis (Some Observations Concerning Cataract and Its Management)..	390
Cesarean Section, Conservation in.....	186	KEIPER, GEORGE F., Lafayette (Why Belong to a Medical Society).....	181
Cholecystectomy vs. Cholecystotomy.....	466	(Pretended Blindness and Deafness and Their Detection).....	422
CLARK, EDMUND D., Indianapolis (Report of Two Cases of Extra-Uterine Pregnancy at or Near Term)	89	KENNEDY, THOMAS C., Indianapolis (Radium Therapy)	105
CLEVINGER, WILLIAM F., Indianapolis (Infections of the Mastoid; Skiagraphy and Other Aids to Early Diagnosis).....	140	KIMBERLIN, A. C., Indianapolis (Diagnosis of Diseases of the Gallbladder).....	457
Coagulen (Kocher-Fonio); Personal Experiences in Eight Cases.....	385	KNOEFEL, AUGUST F., Terre Haute (First Aid Work of the United States Bureau of Mines)	314
COLE, ALBERT M., Indianapolis (Roentgen-Ray Diagnosis of Mastoid Disease).....	139	Lacrimal Apparatus, Concerning Certain Phases of Diseases of the.....	43
Cows' Milk, The Relation of, to Human Tuberculosis	193	LANDERS, MR. HOWE S., Indianapolis (Workmen's Compensation Law in Its Relation to the Practice of Medicine).....	1
Deafness and Blindness, Pretended, and Their Detection	422	LANGDON, H. K., Indianapolis (Bacteriology of Mastoiditis)	342
DUEMLING, H. A., Ft. Wayne (Cholecystectomy vs. Cholecystotomy)	466	Leprosy in Indiana—Report of a Case.....	312
EASTMAN, JOSEPH RILUS, Indianapolis (Abdominal Wounds in War).....	417	MCCASKEY, G. W., Fort Wayne (The Incidence, Diagnosis and Treatment of Visceral Syphilis)	51
EGART, S. L., Indianapolis (Leprosy in Indiana) ..	312	MARTIN, H. H., Laporte (Gallbladder Surgery)..	463
Empyema of Chest, Occlusive Drainage for....	135	Mastoid Disease, Roentgen-Ray Diagnosis of....	139
Extra-Uterine Pregnancy at or Near Term—Report of Two Cases.....	89	Mastoid, Infections of; Skiagraphy and Other Aids to Early Diagnosis.....	140
Eyeball, Conservative Treatment of Penetrating Wounds of.....	307	Mastoiditis, The Bacteriology of.....	342
Femur, Evolution of a Splint for the.....	276	MAURER, J., Marion (Errors in Diagnosis of Diseases of the Accessory Sinuses).....	143
First Aid Work of the United States Bureau of Mines	314	Maxillary Sinuitis, Diagnosis of.....	232
FLEMING, J. C., Elkhart (Factors Which Contribute to Safety and Success in Surgical Procedures)	269	Medical Society, Why Belong to a.....	181
		MILLER, HUGH, South Bend (The Diagnosis of Certain Gastric Disorders).....	10
		Mines, First Aid Work of the United States Bureau of.....	314
		Nerve Blocking for the Relief of Genital and Anal Pruritus.....	341

	PAGE		PAGE
Ophthalmology and Oto-Laryngology, A Working Knowledge of for the General Physician..	286	War, Abdominal Wounds in.....	417
Penetrating Wounds of the Eyeball, Conservative Treatment of.....	307	Wassermann Reaction, The.....	427
POSEY, WILLIAM CAMPBELL, Philadelphia (Concerning Certain Phases of Diseases of the Lacrimal Apparatus).....	43	Workmen's Compensation Law in Its Relation to the Practice of Medicine.....	1
Pregnancy, Extra-Uterine, at or Near Term—Report of Two Cases.....	8	WYNN, FRANK B., Indianapolis (The Necessity of Coordinating Methods in the Definitive Diagnosis of Pulmonary Tubercular Lesions)....	15
Prescription Work, A Review of.....	317		
Pruritus, Genital and Anal, Nerve Blocking for the Relief of.....	341	SPECIAL ARTICLES	
Radium Therapy.....	105	Evansville Session, The.....	347
RHAMY, B. W., Fort Wayne (The Wassermann Reaction)	427	Medical Preparedness, by Council of National Defense	147
Roentgen-Ray Diagnosis of Mastoid Disease....	139	Military Service, List of Physicians in the State of Indiana Who Have Applied for or Who Have Been Drafted into.....	449
Roentgen-Ray Diagnosis in Pulmonary Tuberculosis	18		
ROSENTHAL, MAURICE L., Fort Wayne (Occlusive Drainage for Empyema of the Chest).....	135	EDITORIALS	
SHAFFER, J. W., Lafayette (Conservation in Cesarean Section).....	186	Adenectomy and Tonsillectomy, Opposition to... ..	429
SHIMER, WILL, Indianapolis (The Relation of Cows' Milk to Human Tuberculosis).....	193	American Association of Military Surgeons, Annual Convention of.....	432
Sinusitis, Maxillary, The Diagnosis of.....	232	Anesthetist, The Nurse as an.....	65
Sinuses, Accessory, Errors in Diagnosis of Diseases of the.....	143	Compensation Acts, Inequitable.....	243
Skiagraphy and Other Aids to Early Diagnosis of Infections of the Mastoid.....	140	Contract Surgical Work, Inadequate Compensation for.....	323
SMILEY, ORVALL, Indianapolis (Nerve Blocking for the Relief of Genital and Anal Pruritus)	341	Cooperation of Medical Men for Economic Advancement	152
SOWDER, CHARLES R., Indianapolis (Diseases of the Gallbladder; Medical Treatment).....	460	Court Plaster.....	325
Splint for the Femur, Evolution of a.....	276	Diphtheria Bacilli, Pseudo.....	64
SPOHN, GEORGE W., Elkhart (A Working Knowledge of Ophthalmology and Oto-Laryngology for the General Physician).....	286	Disease Carriers, Human.....	19
Surgery, Gallbladder	463	Doctor's Duty in Times of War, The.....	152
Surgical Procedures, Factors Which Contribute to Safety and Success in.....	269	Doctors, Pseudo, Not Wanted in War Times....	155
Syphilis, A Report of Venarsen in the Treatment of.....	339	Doctors, Real, Only, Serving in the War.....	242
Syphilis, Visceral, The Incidence, Diagnosis and Treatment of.....	51	Duty, Do Your.....	293
Tubercular Lesions, Pulmonary, The Necessity of Coordinating Methods in the Definitive Diagnosis of.....	15	Economic Advancement, Cooperation of Medical Men for.....	152
Tuberculosis, Human, The Relation of Cows' Milk to.....	193	Education, The Travesties of.....	244
Tuberculosis Plus.....	59	Electrotherapy	111
Tuberculosis, Pulmonary, The Roentgen-Ray Diagnosis in.....	18	Enlisted Doctors, Safeguarding Medical Practices of.....	196
Venarsen in the Treatment of Syphilis, A Report.	339	Evansville Session, The.....	396
Visceral Syphilis, The Incidence, Diagnosis and Treatment of.....	51	Farmers, Unwarranted Leniency to.....	155
		Focal Infection.....	151
		Food, Conservation of.....	197
		Food, Conservation of.....	397
		Fort Benjamin Harrison, Sanitation at.....	430
		Governmental "Red Tape" Should Be Abandoned	291
		Government Service, Osteopaths in.....	323
		Hospitals, Suppression of Unnecessary Noises in.	199
		Indiana, Doctors Have an Opportunity to Advance	154
		Infantile Paralysis.....	368
		Infection, Focal.....	151
		Insurance, Group, for Medical Men.....	198
		Insurance Policies, Interpretation of Total Disability Clause in.....	154

	PAGE	CORRESPONDENCE	PAGE
Interns, Hospital, and Medical Students in Military Service.....	370	Autopsies, Clinical Diagnoses Checked by.....	453
Intestinal Stasis.....	111	Eastman, Dr. J. R., Detained in Copenhagen....	123
Kultur, More.....	398	Eastman, Dr., Comments on the War.....	213
Legislation: Why Efforts to Lower Indiana Medical Standards Should Be Defeated.....	19	Excuse Me.....	382
Legislative Action on Bills Affecting the Medical Profession	112	Explanation, An.....	123
Medical Preparedness	195	<i>Journal, The</i> , Complimented.....	122
Medical Reserve Officers, Immediate Duties of..	243	Jukes Perpetuated.....	334
Medical School, Our, Urgent Needs of.....	21	Kick, Just a.....	334
Medical Science, Opponents to Advances in.....	474	National Defense, State Committee of.....	256
Medicine and Surgery, Lowering the Standards for the Practice of.....	369	Notice to Members of the Eye, Ear, Nose and Throat Section	487
Meningitis, Epidemic.....	291	Practice of Medicine, Illegal.....	487
Military Service, Physicians in.....	369	Secretaries, Notice of County Medical Society....	487
Nurse as an Anesthetist, The.....	65		
Nutrition	395	DEATHS	
Operations, Unnecessary, and Incompetent Surgeons, The Problem of.....	322	Abbott, Clarence.....	118
Osteopaths in Government Service.....	323	Adye, George F.....	117
Paralysis, Infantile.....	368	Allen, Harriet E.....	207
Patriotism Not Confined to Those Who Go to War	292	Allen, Julia E.....	37
President, Our.....	368	Asbury, William H. H.....	478
Public Health: Helping Doctors to Help the People	397	Bailey, Alexander.....	27
"Red Tape," Governmental, Should Be Abandoned	291	Bair, Mary A.....	295
Research Work in Our Medical Schools, The Need of.....	195	Banker, Adoniram J.....	207
Secretaries, County, Notice to New.....	22	Bard, Nancy	478
Secretaries, County, Wake Up!	21	Benham, Charles W.....	440
"Slackers" in the Medical Profession.....	241	Benson, William O.....	478
Students, Medical, and Hospital Interns in Military Service.....	370	Bigelow, James A.....	163
Surgeons, Incompetent, and Unnecessary Operations, The Problem of.....	322	Booth, Belle Evans.....	374
Surgery and Medicine, Lowering the Standards for the Practice of.....	369	Bruner, Charles K.....	250
Swindle, Doctors Defend.....	199	Bulhand, Cyrus J.....	478
Syphilis, Late.....	64	Burge, Mary Belle.....	163
Theaters, Moving Picture, Renovate and Fumigate the.....	154	Canady, Nathan F.....	27
Tonsillectomy and Adenectomy, Opposition to....	429	Canfield, Sarah Ann.....	207
Troops, Safeguarding the Health of Our.....	324	Carper, Andrew J.....	163
Tuberculosis, Pulmonary, Sputum Examinations in	241	Cassidy, John.....	207
Typhoid Epidemics.....	395	Chambers, Samuel F. B.....	250
Typhoid Transmission.....	429	Collings, Samuel P.....	163
		Conwell, L. V.....	330
War Censorship	292	Cullen, John C.....	72
War, Only Real Doctors Serving in the.....	242	Cummings, David J.....	350
War, The Doctor's Duty in Times of.....	152	Daggy, Thornton.....	374
War Times, Pseudo-Doctors Not Wanted in....	155	Darby, A. Byron.....	250
Widal Reaction, The Significance of the.....	430, 474	Davis, Fielding L.....	478
Wives, Doctors', Garrulous.....	200	Davis, Georgia Anna.....	163
		Davis, Oliver M.....	374
		Dickinson, Amelia A.....	118
		Dickson, Fred C.....	401
		Eastes, Sarah.....	374
		Estabrook, Leonard W.....	72
		Farmer, H. W.....	478
		Farnsworth, T. W.....	401
		Farris, Sarah.....	374
		Fischer, Wyman H.....	72

	PAGE		PAGE
Fish, Samuel R.....	27	Mullinix, Prementer.....	401
Fitzpatrick, Job D.....	478	Munsey, Sarah Katherine.....	478
Foust, Philip G.....	117	Murphy, George.....	478
Fox, Henry Albert.....	296	Murphy, Virginia.....	330
Freedman, Benjamin F.....	207	Neely, Isaac L.....	330
Gabel, Harrison.....	478	Newman, Harmer M.....	440
Gage, Loren F.....	27	Newman, Miles M.....	163
Gebauer, Emanuel H.....	163	Norton, Effa A.....	27
Gillum, William H.....	163	Null, Lycurgus S.....	330
Goodrich, Charles P.....	163	Ogle, Hercules.....	295
Gorrell, Andrew G.....	163	Payne, Philander W.....	374
Gray, Jane N.....	72	Pollard, William S.....	478
Green, William E.....	72	Porter, John R.....	163
Griffis, William T.....	478	Roberts, S. R.....	330
Haight, Arthur M.....	72	Rodebaugh, Frank L.....	440
Harold, Nathan G.....	250	Roseberry, Issac A.....	374
Haugh, Charles C.....	250	Scholl, Charles E.....	296
Hause, William.....	163	Sellers, John S.....	27
Heusler, Ernst H. C.....	440	Seymour, Mrs.....	72
Holder, Richard E.....	296	Simison, John F.....	440
Hopkins, Deborah L.....	72	Smith, John W.....	72
Howland, William V.....	250	Snyder, Benjamin F.....	250
Hunt, William A.....	118	Somes, Joseph F.....	401
Johnson, Francis W.....	296	Spencer, Alexander C.....	117
Johnson, W. A.....	117	Spottswood, Edmund T.....	72
Jordan, Loran W.....	401	Stafford, Charles A.....	72
Keller, Martha E.....	207	Stalker, Homer.....	295
Kienzle, Frederick W.....	72	Stark, John R.....	401
Knapp, Samuel O.....	401	Stevens, Curtis V.....	295
Kolmer, John.....	440	Stork, John Wesley.....	401
Lamberson, Harry M.....	207	Sweney, Isaac F.....	296
Lambert, Isaac C.....	72	Teal, George A.....	295
Lameroux, Scott P.....	296	Thomas, Charles L.....	163
Landon, Hannibal.....	72	Thomas, Flora M. B.....	401
Lane, Allen K.....	440	Thomas, James W.....	330
Leister, William L.....	163	Thomas, Richard M.....	27
Lord, Samuel.....	72	Triplett, Charles E.....	401
McCain, Thomas J.....	72	Tucker, Anna C.....	478
McCoy, Emma.....	207	Van de Walker, James G.....	72
McCoy, Pitt Y.....	72	Vincent, Alonzo W.....	27
McCray, Robert S.....	330	Walden, Charles H.....	118
McMillan, James P.....	330	Walters, Mary H.....	401
Magenheimer, V. A.....	374	Walton, George E.....	330
Martin, Henry C.....	27	Ward, James G.....	296
Marvin, John P.....	330	Wardlaw, Sarah.....	163
Mavity, Mary A.....	118	Watson, Joseph C.....	250
Mercer, Andrew B.....	374	Webster, Ellery C.....	27
Metzger, Owen E.....	163	Webster, John C.....	479
Moore, George B.....	295	Wells, Abner T.....	374
Morris, John E.....	374	Wells, Isaac N.....	250
Morris, Mrs. Margaret.....	440	White, Mae Hanson.....	163
Morris, Thomas B.....	207		
Motter, Thomas S.....	478		

	PAGE
Wright, Mrs. C. L.....	401
Wright, Samuel V.....	118
Yandell, William W.....	72
Yoke, Charles.....	330
Young, Michael A.....	330

SOCIETY PROCEEDINGS

Bartholomew.....	35, 173, 220, 300, 488
Benton	488
Carroll.....	36, 263, 453
Delaware	129, 264
Delaware-Blackford.....	264, 300, 336
Eighth District.....	453
Elkhart.....	36, 81, 129, 173
Floyd	37
Fort Wayne.....	81, 128
Huntington.....	38, 130, 175
Indiana State Medical Association.....	77, 168, 214, 256, 408
Indianapolis.....	32, 123, 170, 215, 257
Johnson	83
Lake	38, 83, 177
Madison.....	130, 177, 220, 265, 454, 488
Madison-Grant	301
Muncie Academy of Medicine.....	79, 127, 335
Noble	38, 301
Posey	301, 488
Pulaski	130, 301, 411
St. Joseph.....	83
Seventh District.....	79
Tippecanoe	83, 488
Tipton	131

BOOK REVIEWS

Anatomy, Handbook of (Young).....	384-xix
Animals, The Pathology and Differential Diagnosis of Infectious Diseases of (Moore).....	87
Blood Pressure (Norris).....	86
Cataract, Senile, Traumatic, and Congenital (Fisher)	338-xix
Central Indiana Hospital for Insane, Report from the Pathological Department and the Department of Clinical Psychiatry of the (Edenharter)	224
Chemistry, The Newer Methods of Blood and Urine (Gradwohl-Blaivas).....	268
Chicago, Medical Clinics of.....	42, 133, 268, 304
Chicago, Surgical Clinics of.....	180, 267, 384, 414
Children, Diseases of (Tuttle-Hurford).....	304
Constipation, Obstipation and Intestinal Stasis (Gant)	88

Council on Pharmacy and Chemistry of the A. M. A., Annual Reprint of Reports of (1917)	222
Diabetes, The New Method in (Kellogg).....	134
Diabetes, The Starvation Treatment of (Hill-Eckman)	268
Diagnosis from Ocular Symptoms (Foster)....	306
Diagnosis, Physical, A Manual of (Flint-Thacher)	304
Diseases of Women (Crossen).....	492
Drugs, Botanic (Blair).....	338-xix
Emergencies, Treatment of (Owens).....	384-xx
Exercise and Massage, Therapeutic, A Manual of (Becholz)	180
Exercise, Physical, for Invalids and Convalescents (Ochsner)	384
Eye, Ear, Nose and Throat, Manual on (Ballenger-Wippert)	306
Eyes, The Nervo-Muscular Mechanism of the, and Routine in Eye Work (Savage).....	222
First Aid and Emergency Treatment, A Textbook on (Burnham)	415
Fractures and Dislocations, A Practical Treatise on (Stimson)	304
French for Doctors and Nurses, First Lessons in Spoken (Wilkins)	490
Freud's Theories of Neuroses (Hitschmann-Payne)	180
General Medicine (Billings-Raulston).....	491
Genito-Urinary Organs and the Kidneys, Diseases of the (Greene-Brooks)	303
Gynecologic and Abdominal Procedures, Care of Patients Undergoing (Montgomery).....	134
Gynecology, A Textbook on the Practice of (Ash-ton)	134
Gynecology, Handbook of (Lewis-de Roulet)....	415
Intelligence, Building Human (Lorand-Tr. Fischelis)	414
Impotency, Sterility, and Artificial Impregnation (Davis)	303
Limbs, Broken, An Inquiry into the Principles and Treatment of (Fluhrer)	179
Man—An Adaptive Mechanism (Crile).....	416
Materia Medica and Prescription Writing, Practical (Bethea)	384-xx
Mayo Clinic, Collected Papers of the, Vol. VIII, 1916	384-xix
Medical Clinics of North America, The (Saunders)	490
Medical and Surgical Reports of the Episcopal Hospital (Dornan)	490
Murphy, John B., Clinics of.....	86
Muskets and Medicine (Johnson).....	490
Nervousness, The Mastery of (Carroll).....	490
Neurotic Constitution, The (Adler-Lind).....	222
New and Nonofficial Remedies, 1917.....	222

	PAGE		PAGE
Nostrums for Kidney Diseases and Diabetes.....	455	Prescription, Therapeutically, Pharmaceutically, Grammatically, and Historically Considered (Wall)	456
Nutrition and Clinical Dietetics (Carter-Howe- Mason)	456	Preventive Medicine and Hygiene (Rosenau- Whipple-Trask-Salmon)	492
Nutrition, The Elements of the Science of (Lusk). 414		Progressive Medicine (Hare).....	42, 180, 338, 414
Obstetrics (Williams)	456	Psycho-Analytic Method, The (Pfister-Payne)... 223	
Otology, A Manual of (Perkins)	86	Public Health Protection, American (Hemenway). 42	
Pharmacology, Experimental (Jackson)	304	Sanitation for Medical Officers (Vedder).....	455
Poliomyelitis in All Its Aspects (Ruhräh-Mayer). 492		Skin, A Treatise on Diseases of the (Stelwagon). 134	
Practical Medicine Series, Vol. VII, 1916 (DeLee- Stowe)	86	Skin, Diseases of the (Sutton)	456
Practical Medicine Series, Vol. VIII, 1916 (Butler- Evans)	86	State Board Questions and Answers (Goeff).... 268	
Practical Medicine Series, Vol. IX, 1916 (Ormsby- Mitchell)	134	Stomach, Intestines and Pancreas, Diseases of (Kemp)	303
Practical Medicine Series, Vol. X, 1916 (Patrick- Bassoe)	179	Surgery, Traumatic (Moorhead).....	306
Practical Medicine Series, Vol. I, 1917 (Billings- Raulston)	267	Surgical Clinics of Chicago (Saunders).....	490
Practical Medicine Series, Vol. II, 1917 (Ochs- ner)	384	Surgical Operations, Textbook of, Vol. II (Krause-Heyman-Ehrenfried)	416
Practical Medicine Series, Vol. IV, 1917 (Dudley- Schocket)	384	Syphilis (Thompson)	88
Practical Medicine Series, Vol. V, 1917 (Abt- Ridlon)	415	Therapeutics, A Textbook of Practical (Hare).. 88	
Practical Treatment (Musser).....	491	Therapeutics, Suggestive, Applied Hypnotism, Psychic Science, Handbook of (Munroe)... 305	
Practice of Medicine (Dayton).....	490	Tuberculosis, Clinical, Vols. I and II (Pottenger) 224	
Practitioners' Visiting List for 1917 (Lea & Fe- biger)	42	Tuberculosis, Pulmonary (Otis).....	268
		Tuberculosis, The Causes of (Cobbett).....	416
		Urinalysis, Practical (Williams).....	384
		Urology, Journal of, Vol. I, No. I.....	180

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